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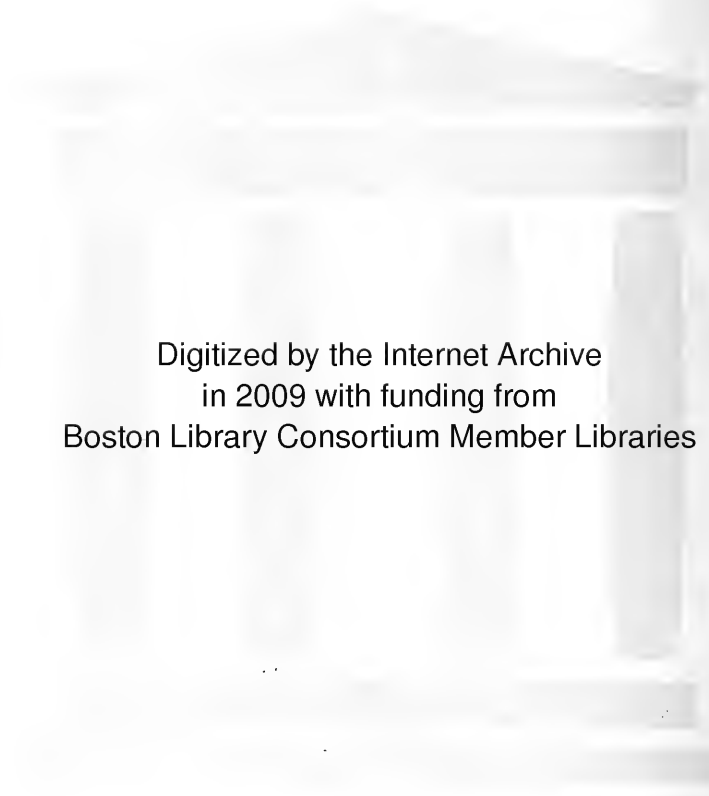
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SEVENTY-NINTH ANNUAL REPORT

OF THE

BOARD OF EDUCATION.

JANUARY, 1916.



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1916.

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Admission
for students to the
State Board of Publication

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STATE BOARD OF EDUCATION.

1916.

Term expires
May 1.

BY APPOINTMENT.

1916.	FREDERICK P. FISH,	BROOKLINE.
1917.	JEREMIAH E. BURKE,	BOSTON.
1916.	ELLA LYMAN CABOT,	BOSTON.
1918.	JAMES CHALMERS,	FITCHBURG.
1918.	A. LINCOLN FILENE,	BOSTON.
1917.	THOMAS B. FITZPATRICK,	BROOKLINE.
1916.	FREDERICK W. HAMILTON,	CAMBRIDGE.
1917.	PAUL H. HANUS,	CAMBRIDGE.
1918.	MARGARET SLATTERY,	MALDEN.

STAFF OF THE BOARD OF EDUCATION.

DAVID SNEDDEN, *Commissioner.*

Elementary and High Schools.

WILLIAM ORR, *Deputy Commissioner.*

AGENTS.

F. G. WADSWORTH,	<i>Elementary Schools.</i>
C. D. KINGSLEY,	<i>High Schools.</i>
W. I. HAMILTON,	<i>Registration of Teachers.</i>

Vocational Schools.

R. O. SMALL, *Deputy Commissioner.*

AGENTS.

C. R. ALLEN,	<i>Day and Evening Schools for Boys and Men, and Training Courses for Vocational Teachers.</i>
C. L. PEPPER,	<i>Assistant to Mr. Allen.</i>
R. W. STIMSON,	<i>Agricultural Schools.</i>
_____	<i>Day and Evening Schools for Girls and Women.</i>
NELLIE M. WILKINS,	<i>Assistant.</i>

University Extension.

JAMES A. MOYER, *Director.*

AGENTS.

JOSEPH W. L. HALE,	<i>Correspondence Study.</i>
ROBERT H. SPAHR,	<i>University Extension.</i>

J. F. HOPKINS,	<i>Director, Art Education.</i>
E. C. BALDWIN,	<i>Business Agent.</i>

ANNUAL REPORT

OF THE

BOARD OF EDUCATION.



ANNUAL REPORT.

The Board of Education has the honor to submit, herewith, to the Legislature, in accordance with section 6 of chapter 39 of the Revised Laws, as amended by section 4, chapter 457 of the Acts of 1909, its seventy-ninth annual report.

In Part I. the Commissioner of Education sets forth, in section A (page 21, "The Improvement of Educational Administration in Massachusetts"), a number of educational problems which must be matters of concern to citizens and educators in Massachusetts during the next decade, if the development of education in this State is to keep pace with the demands which will certainly be made upon it. Most of the topics (a résumé of which will be found on page 21) are discussed in their relation to educational administration, since only by right methods of administrative organization and procedure, including underlying legislation, can conditions be created under which effective teaching becomes possible.

Section B (page 88) is a review of the report on the State normal schools submitted to the Legislature of 1915 by the Commission on Economy and Efficiency. Some of the findings and criticisms of the commission, as these are presented by the Commissioner of Education, are obviously important. In fact, in many cases the problems involved had already been clearly recognized by the Board, and measures designed to bring about necessary improvements had been initiated at the time that the report was submitted. Other findings and criticisms of the commission appear to the commissioner to be based upon inadequate information as to existing conditions and pending changes in the normal schools themselves.

Section C (page 115) contains proposed legislation to be submitted by the Board to the General Court of 1916. This legislation consists of nine measures, each of which is definitely constructive in character as preparing the way for better conditions in educational administration in Massachusetts.

In Part II. the commissioner reviews those features of the reports of the deputy commissioners, agents and normal school principals which are of the greatest general interest, giving especial consideration to the recommendations made by these educators for future developments in their respective fields of work.

Among the matters herein discussed, the following are of especial importance, in view of present educational conditions in Massachusetts and probable developments in the immediate future: (*a*) proposed manuals for use of high school teachers; (*b*) recommendations relative to development of intermediate schools; (*c*) improvement of rural school administration; (*d*) further development of the teachers' registration bureau; (*e*) the organization of continuation schools; (*f*) the training of teachers for vocational schools; (*g*) the improved administration of industrial schools; (*h*) county agricultural schools; and (*i*) various actual or proposed extensions of work in normal schools.

Part III. of the report relates to the routine detail work of the staff of the Board, and contains material heretofore presented as Part II. Part IV. presents the statistics compiled from the annual school returns.

Chapter 294 of the Acts of 1915 created a Department of University Extension under the direction of the Board of Education. James A. Moyer has been appointed director of this department, and a staff of agents and clerical assistants is now being organized under his direction to administer the work of this department. Mr. Moyer was born in Norristown, Pa., in 1877. He graduated from the Lawrence Scientific School of Harvard University in 1899, and holds a master's degree from that university, granted in 1904. Mr. Moyer has been an instructor in the Harvard engineering camp, and afterwards became a general engineer for Westinghouse, Church, Kerr & Co. of New York. From 1908 to 1912 he was assistant professor of mechanical engineering in the University of Michigan. From 1912 to 1915 Mr. Moyer held the professorship of mechanical engineering and the directorship of the Engineering Extension Division of the State College, Pennsylvania. He has established and maintained extension departments in a large number of industrial centers in Pennsylvania, such as

Philadelphia, Harrisburg, Scranton, Pittsburg, York, Lancaster, Erie, Butler and Wilmerding. He has been unusually successful in arranging for part-time or co-operative agreements with various railroads and manufacturing companies. Mr. Moyer has also served as a member of a special committee of the Land Grant College Association, on the preparation of text-books for extension education, and is the author of several widely used manuals on steam turbines, internal combustion motors and power plant economics. Mr. Moyer began service as director of the Department of University Extension Oct. 20, 1915.

W. L. Hale has been appointed an agent of the Department of University Extension, and began service Nov. 1, 1915. Mr. Hale was born in Newburyport Aug. 30, 1886, and was educated in the Newburyport public schools. He graduated from the Massachusetts Institute of Technology in 1908 with the degree of bachelor of science in electrical engineering. He was then for two years in the Department of Electrical Engineering in the Pennsylvania State College. In September, 1910, he was detailed to organize shop apprentice schools for the Pennsylvania Railroad, and later became supervisor of this system of schools. He retained the position of associate professor of electrical engineering, and was detailed for college extension work in the Pennsylvania State College.

Mr. Hale has published two books on elementary mathematics. He has made a study of public, private and corporation schools in this country and abroad. He aided in the organization of the National Association of Corporation Schools in 1912, and is now chairman of the committee on trade apprenticeship schools of this organization. Mr. Hale, for the present, will be in charge of technical correspondence courses conducted by the Department of University Extension.

Robert H. Spahr has been appointed an agent of the Department of University Extension, and began service in this capacity on Dec. 1, 1915. Mr. Spahr is a native of Maryland. He was born in 1883. After graduating from the Hagerstown High School in Maryland in 1905 he taught in the grammar school for one year and then entered the Washington and Lee University, from which he received the bachelor of science

degree of engineering in 1909. Mr. Spahr was instructor in physics for three years in the State University of Kentucky; in 1912 he became assistant professor in this university, which position he held until 1914. He holds the degree of bachelor of science from the State University of Kentucky for graduate work in physics, and has also pursued courses in the University of Chicago in the graduate school of civil engineering. In 1914 Mr. Spahr was appointed a member of the faculty of the Pennsylvania State College and put in charge of the field organization of engineering extension for that State. He resigned this position during the summer of 1915 to become professor of physics at the Kansas State Manual Training Normal School. Mr. Spahr is the author of a set of physical laboratory notes, is a contributor to magazines and has traveled extensively.

Albert G. Boyden, forty-six years principal, and since 1906 principal emeritus of the Bridgewater State Normal School, died on May 30, 1915.

Mr. Boyden was born in Walpole, Feb. 5, 1827. He graduated from the Bridgewater Normal School in 1849, and remained in that school one year as a special student. In the winter of 1850 and 1851 he taught a grammar school in Hingham, and soon after returned to the normal school, where he was for a short time assistant under Principal Nicholas Tillinghast. He was then for three years principal of the English High School at Salem, and for one year submaster of the Chapman Grammar School in Boston. In 1860 he became an assistant in the Bridgewater Normal School, and after a three years' term in this position was, in 1863, elected principal of the school. When he took charge the school consisted of 4 teachers and about 70 students. During his connection with the school the teaching staff increased to 16, and the total enrollment to 300; the property grew in value from \$10,000 to over \$500,000. He trained more than 4,000 persons for educational work. On his resignation from the principalship he was made principal emeritus, and continued to teach in the school until nearly the time of his death. Mr. Boyden early devoted himself to the study of educational methods, and as principal he applied the principles of education which he

formulated to all the courses of study in the normal school. He was especially versed in what was formerly called the "analytic-objective" method of teaching, and introduced laboratories and apparatus for its effective demonstration.

Cyrus M. Durgin, principal of the Lowell State Normal School, died July 26, 1915, at Wilton, N. H. Mr. Durgin was born in Lowell on Feb. 11, 1869. He attended the public schools of that city, and graduated from the high school in 1886. He graduated from Amherst College in 1890 with the degree of A.B. He then returned to Lowell, and after teaching in the high school for a time as substitute became master of the Bartlett School, a practice school connected with the Lowell State Normal School, which position he held from 1892 until he was appointed principal of the Lowell State Normal School in 1908. During his seven years of service in this school as principal Mr. Durgin did a valuable service in giving a definite and professional character to the curriculum, so that the school was considered by competent authorities as one of the most efficient in the State.

John J. Mahoney, assistant superintendent of schools in Cambridge, has been appointed principal to succeed Cyrus M. Durgin.

Mr. Mahoney was born in Lawrence Dec. 2, 1880. He graduated with the rank of valedictorian from St. Mary's Parochial School, Lawrence, in 1896. He graduated from Phillips Andover in 1899, and from Harvard in 1903, with the degree of A.B. *magna cum laude*. He has taken several graduate courses in the division of education at Harvard. Mr. Mahoney taught English in the Lawrence High School in 1903 and 1904. From 1904 to 1906 he was principal of a grammar school in Lawrence, and in 1906 was elected supervisor of the Lawrence evening schools, which position he retained until 1912, when he was elected assistant superintendent of schools in Cambridge. He has had immediate charge of the evening schools, and has also acted as secretary of the school committee. He has also been examiner of teachers for the Boston school committee. Under the auspices of the National Civic Federation Mr. Mahoney spent the winter of 1907-08 in a study of the schools of England and Scotland. He has written several reports on courses of study, and also articles for educational magazines.

In response to a request from the managers of the Panama-Pacific Exposition at San Francisco, Massachusetts presented an exhibit of the work of State-aided vocational schools in Massachusetts, together with that of the textile schools of this State. The educational exhibit was in immediate charge of C. T. C. Whitcomb, formerly principal of the high school at Brockton, the Commissioner of Education acting in an advisory capacity. Notwithstanding the difficulties of giving a concrete exposition of the theory and practice of vocational education in this State, the exhibit is acknowledged to have been a decided success. Steps are being taken to return the exhibit to Massachusetts, and to use it to inform the people of the Commonwealth as to the extent, variety and character of vocational education now in operation in this State.

The Board of Education is submitting bills for proposed legislation on the following matters:—

(a) An Act providing for State certification of teachers. This measure was before the Legislature of 1915, and was by that body referred to the General Court of 1916.

(b) An Act providing for a record of minors, to take the place of the annual school census, as now required.

(c) An Act to provide additional State aid for towns of less than five hundred families, maintaining high schools.

(d) A Resolve authorizing and directing the Board to investigate county training schools, and making an appropriation for such investigation.

(e) An Act requiring school committees to formulate a code of rules and regulations, whereby their procedure is to be governed.

(f) An Act to provide for the establishment of sewer service to the State Normal School at Framingham.

(g) At the request of the Association of Massachusetts Superintendents of Schools, the Board also submits a bill providing for a State system of certification of superintendents of schools.

(h) An Act authorizing and directing the Board to annually report on all educational institutions which receive aid from the Commonwealth, and making appropriation for such reports.

(i) An Act giving the Board of Education authority to make contracts with cities and towns for the establishment and main-

tenance of training schools in connection with State normal schools.

(j) The Board also asks for the following appropriations for State normal schools: —

1. For building, equipping and furnishing a dormitory, and for building and equipping a new laundry, and for certain other improvements at the State Normal School at Framingham, the sum of \$72,245.

2. For a new dormitory, refectory and kitchen at the State Normal School at Bridgewater, the sum of \$237,000, \$88,000 of which is to be available in 1916 and \$149,000 in 1917.

A brief discussion of the substance of each of these proposed acts is presented in Part I. of this report.

Respectfully submitted,

FREDERICK P. FISH, *Chairman*,
JEREMIAH E. BURKE,
ELLA LYMAN CABOT,
JAMES CHALMERS,
A. LINCOLN FILENE,
THOMAS B. FITZPATRICK,
FREDERICK W. HAMILTON,
PAUL H. HANUS,
MARGARET SLATTERY,

Members of the Board.

BOARD OF EDUCATION.

SEVENTY-NINTH ANNUAL REPORT.

OFFICES OF THE BOARD OF EDUCATION,
FORD BUILDING, BOSTON, MASS., Jan. 1, 1916.

To the Board of Education.

The Commissioner of Education herewith submits for your consideration the appended report. Part I. consists of the report of the commissioner, and Part II. of a review by the commissioner of the reports of the agents of the Board and of the normal school principals.

PART I. Report of the Commissioner.

- A. The Improvement of Educational Administration in Massachusetts.
- B. Review of Report of the Commission on Economy and Efficiency relative to Massachusetts Normal Schools.
- C. Proposed Legislation.

PART II. Review of Reports of Agents of the Board and Normal School Principals.

- I. Department of Elementary and Secondary Education.
- II. Department of Vocational Education.
- III. Report of Business Agent.
- IV. Reports of Normal School Principals.

PART III. Detailed Report of the Work of the Board.

- I. Summary of Statistics for School Year 1914-15.
- II. State Normal Schools.
- III. High Schools.

PART III. Detailed Report of the Work of the Board — *Con.*

IV. Registration of Teachers.

V. Superintendents of Schools.

VI. Conferences.

VII. State-aided Vocational Education.

VIII. County Training Schools.

IX. Massachusetts School Fund.

X. Financial Statement of the Board.

PART IV. Statistical Returns.

Abstract of School Returns for the School Year 1914-15.

DAVID SNEDDEN,
Commissioner.

PART I.

REPORT OF THE COMMISSIONER OF EDUCATION.

- A. THE IMPROVEMENT OF EDUCATIONAL ADMINISTRATION IN MASSACHUSETTS.
 - B. REVIEW OF THE REPORT OF THE COMMISSION ON ECONOMY AND EFFICIENCY RELATIVE TO MASSACHUSETTS NORMAL SCHOOLS.
 - C. PROPOSED LEGISLATION.
-
-

PART I.
REPORT OF COMMISSIONER.

A. THE IMPROVEMENT OF EDUCATIONAL ADMINISTRATION IN MASSACHUSETTS.

The commissioner presents for consideration herewith a general discussion of some of the conditions which must be studied and steps that should be taken in any systematic, deliberate and comprehensive effort to improve the quality, and to effect desirable extensions in the scope, of public education in Massachusetts during the next few years. These discussions and proposals relate chiefly to educational administration, for the reason that, as education is now organized, improvements in administration and administrative conditions constitute the first and most necessary approach towards the making of specific improvements.

The discussion is presented under the following main heads:—

I. Certain preliminary considerations (these involve some of the factors of social organization and the resulting demands on educational administration which are fundamental in character) (page 22).

II. A summary of conditions adverse to the further development of sound educational administration in Massachusetts (page 25).

III. A summary of conditions favorable to further sound development of educational administration (page 30).

IV. Some specific needs of educational administration in Massachusetts (this includes an examination of several of the divisions of education in each of which there exist clearly defined needs for further development or partial reorganization, page 35).

Separate consideration is given to each of the following topics: (a) elementary education in lower grades; (b) intermediate schools; (c) secondary education; (d) vocational education; (e) continuation education; (f) kindergarten and subprimary education; (g) State-aided higher technical education; (h) Normal Art School; (i) university extension teaching; (j) education of immigrants; (k) education of delinquents; (l) education of defectives; (m) normal school education;

(*n*) training of teachers for secondary schools; (*o*) training of teachers for vocational schools; (*p*) certification of teachers; (*q*) the after-training of teachers; (*r*) compulsory school attendance; (*s*) medical inspection of schools; and (*t*) supervision of plans for school buildings.

V. Fundamental requirements (being a brief analysis of certain of the general requirements essential to further development of sound educational administration in each of the fields described above). These include (*a*) application, to an increasing extent, of scientific standards in education; (*b*) application of the principles of co-ordination of service, and of supervision, in relation to all specific administrative functions; and (*c*) provision of adequate financial aid from State sources as a means of equalizing educational opportunities (page 78).

The topics discussed are so numerous, and the scope of some of them so comprehensive, that the treatment is necessarily condensed. This condensation, since it has also rendered necessary the omission of many of the detailed considerations upon which findings and recommendations are based, may have the effect of causing certain of the conclusions to appear unjustifiably dogmatic. They are believed to represent, nevertheless, the matured convictions of those persons who have given fullest consideration to current conditions and problems in educational administration.

I. Some Preliminary Considerations.

Because social organization in both urban and rural communities is now exceedingly complex, legitimate demands for specialized and trained service in all phases of public education are growing more exacting; and the inter-relations of local community and State in the support and direction of various forms of public school service are steadily becoming more involved and intricate. It is a reasonable assumption, therefore, that good schools and good teaching cannot be found where administrative agencies are incomplete, poorly organized or of inferior quality. Hence, the surest single test of the soundness of the underlying educational ideals and of the school practices which determine the quality of the education being offered in any State or community is to be found in the character of the aims, means and methods of educational administration.

"Administrative agencies," as the term is here used, include the officials charged with educational administration; the con-

stitutional and statutory provisions by which public education is authorized and required; the purposes and methods formulated in principles, policies, programs, courses of instruction and regulations used by educational administrators as guides to efficient and economical schooling; and the standards and tests by which the extent and character of the service offered may be measured. Administrative agencies in education, and the practices which they originate, affect and control, are here discussed under the head of "educational administration."

Current problems in educational administration can be studied to best advantage when it is recognized that education, and especially public education, is a large and important phase of the general "social economy" of community, State and nation, and as such must conform in its broader aims, means and methods to the principles now more or less consciously applied in that social economy. The term "social economy," as here used, comprehends the expressed ideals, co-operative movements, formulated programs and organized knowledge whereby men and women, sometimes individually, more often collectively, are seeking the betterment of the conditions surrounding or affecting human life. It comprises many and varied efforts, sometimes only partially conscious, looking towards greater individual insight into society as now organized, the end in view being a better development of individuals and of social groups. The purposeful planning of social activities, the accumulation of knowledge of social facts and principles, and the creation of administrative agencies, all come within the range of constructive social action as conceived by students and administrators active in the field of this social economy. In many of its newer departments methods of work are becoming scientific, and application is being made, with some success, of standards and practices resembling those which have effected so many profound changes during recent years in industry, transportation and business.

It has been fully demonstrated that men, working in co-operation, and using accumulated knowledge, can modify and improve, in large measure, the conditions of their material environment as regards the control of natural forces and the accumulation and distribution of material products. Simi-

larly, one of the central articles in the faith of modern civilized peoples is that the purposeful control and improvement of many factors in human welfare besides those of a material character — such as accepted ideals and tested knowledge of social organization, common sentiments, public and private institutions, and co-operative enterprises — are well within the range of conscious positive social action.

This interpretation of education as a large and important phase of modern social economy provides, therefore, the most effective approach to the study of present tendencies and needs in such education, and furnishes the only adequate basis on which to project plans for its further development. The present attitude of the State towards public instruction is but one example of popular insistence on the need and possibilities of collective action in support and control of agencies making for social well-being. Few careful students now doubt that education can, as a result of means now available, be made, in much greater degree than heretofore, concrete and specific in its aims, effective in its processes, and economical of the time, health, ideals and material resources which it employs and affects. Educational administration in important respects can learn from engineering and medicine the great value of provision of ends and prearrangement of means and methods. It can and should organize and increase technical knowledge throughout its entire field, utilize experimental methods, measure results, and compare the relative efficiency of various processes.

If education, as one of the great enterprises in social economy, is to make due progress in the future, such progress can be achieved only, as in those other fields of men's activity wherein modern methods are applied, through a more extensive use of expert knowledge, a greater division and specialization of effort, more extended scientific research, and the provision of increased financial support. The public must increasingly regard outlay of money, time and energy on education as a form of desirable social investment, no less than is revenue expended for defence, for the administration of justice, for highways and for public health. Because returns from education are not always as visible and tangible as are those in other fields, proportionately greater effort will be required to

arouse popular interest sufficient to insure the financial support needed by an enlarged and improved public school system. Existing conditions adverse to, as well as those favoring, the further development of education must frequently be analyzed and examined with a view to desirable and possible changes. The problems presented by specific departments of education must be studied both in their local and specific aspects, and in the light of general principles of sound social economy.

II. Summary of Conditions Adverse to Effective Educational Administration in Massachusetts.

Many of the conditions unfavorable to the future development of sound educational administration in Massachusetts prevail also throughout the United States. Among such conditions may be noted: (1) the large extent to which complete control and direction of educational affairs are vested in local authorities; (2) limited knowledge of definite standards as to aims and methods, and as to actual measurement of results; (3) unsatisfactory provision for the professional improvement of teachers in service; (4) the disproportionate number of women teachers in upper grades and secondary schools; (5) lack of facilities for the training of men teachers; (6) lax enforcement and inadequate supervision of attendance legislation; and (7) defective organization and support of special education of immigrants. But Massachusetts is more seriously handicapped than most other States in the following additional respects: (8) the absence of legislative provisions for the partial equalization of the burden of supporting education; (9) the economic decadence of some rural communities; (10) the relative absence of opportunities for higher education, general and professional, for those finding it difficult to pay tuition fees; and (11) the absence of a State system of custodial education of certain classes of defectives. These restrictive conditions may be briefly discussed as follows:—

LOCAL CONTROL.

Throughout the country each State, by legislation, creates its system of public schools. But owing to inherent conditions of political organization the administration and enforcement of

educational legislation have always been left largely to local authorities. State legislation authorizes and requires the establishment of public schools, sanctions the raising of funds for their support, and at later stages of development definitely prescribes certain requirements which finally extend to the prescription of specific purposes and even administrative methods in detail.

Almost nowhere have effective State supervisory agencies been created to enforce existing legislation, and as a result the actual development of the public schools has varied greatly according to local sentiment and opinion. Imperfections arising from this condition need not be described in detail, as they are familiar to every observer. In recent years there has been a marked trend towards the provision of some form of State supervision, whereby the State as a whole can ascertain the extent to which, in any given community, public money is being rightly expended and sound educational standards enforced. Such tendencies are resolutely opposed by many who sincerely fear the development of undue centralization of authority. Believers in local autonomy hold that State supervision may reach a point where citizens of the local community will cease to be interested in education, will be powerless to affect the course of administration, and, in consequence, will curtail financial and moral support.

Nevertheless, there is evidence in nearly all States that experience and the recognition of the needs of public education are leading State and local authorities to devise means for co-operation in such a way as to preserve and increase local interest on the one hand, and on the other, to insure an economical and effective expenditure of public funds.

SCIENTIFIC STANDARDS.

Education is one of the fields of institutional activity in which "custom" standards, as opposed to scientific standards, have persisted longest. This survival has been inevitable because of the complexity of education and the imperfect development of the sciences which underlie administrative practices and effective instruction, namely, sociology and psychology. As a consequence, educators have been unable or

indisposed to formulate clear and exact definitions of the aims which should control educational organization, methods of instruction and measurement of results. In contrast with medicine, agriculture and engineering, education is, therefore, as yet relatively primitive and empirical as to its underlying theory.

Conditions are, however, now changing rapidly. With the establishment of departments of education in our American colleges and universities systematic study of problems of education by scientific methods has begun. Sociology and psychology, while also still imperfectly developed, are making important contributions. Through these agencies, among others, the way is being opened for definite advances towards the establishment of scientific foundations for administrative practice and methods of instruction. Present problems are discussed below (page 78).

AFTER-TRAINING OF TEACHERS.

The teaching force of American public schools is only in part professionally trained. The largest present need in improving the professional training of teachers, a need especially felt in Massachusetts, where a majority of the younger teachers are already normal school graduates, is for professional training after entering service. Teachers generally begin work at about the age of twenty or twenty-one. Through experience some soon acquire skill, but very many are neither disposed, nor, as a result of existing opportunities, encouraged, to improve themselves in a technical sense, namely, by systematic study as a means of interpreting experience and acquiring better insight.

At present custom and tradition operate against the development of comprehensive means of after-training. School teachers once were employed for a specified number of weeks or months, and during the rest of the year had no responsibility to the schools. Not infrequently they took up other work during the long vacation period. But now the school year is substantially thirty-six weeks in length everywhere in Massachusetts, and the time has arrived when the teacher's relation to her employment should be examined and redefined as preliminary to preparing the way for her better professional training while in service.

A system whereby teachers remain unoccupied eight or twelve weeks in the year, with no direct responsibility for professional training, is essentially faulty, and one which demands radical changes, even though substantial increases of salaries might be required as an accompanying condition. Some constructive proposals are made elsewhere (page 73).

PROPORTION OF WOMEN TO MEN TEACHERS.

For many years the proportion of women to men teachers has everywhere been increasing, and in no State has this process gone farther than in Massachusetts, where men are practically no longer found in grade positions. Definite evils to education certainly result from this condition. The remedy for these must be found in administrative measures, which, on the one hand, define specific fields of teaching in which men should be employed rather than women, and, on the other, provide an adequate supply of trained men for such fields.

A NORMAL SCHOOL FOR MEN.

Normal schools have been fairly successful in training women teachers. Gradually, however, men have ceased to enter these schools as students, so that in Massachusetts and elsewhere there are no satisfactory agencies to assist men to prepare for elementary school positions. The Board of Education has frequently pointed out this defect, and has urged the establishment of a State normal school for men exclusively. Separate schools for men and for women teachers are found abroad, and it is necessary that similar provisions should be made in Massachusetts if any considerable number of men are to be trained for teaching in elementary schools, and at the same time to be enabled to lay foundations for future service as supervisors and administrators. A renewed request for the means to provide a separate normal school for men should be made to the Legislature in the near future.

COMPULSORY SCHOOL ATTENDANCE.

Massachusetts ranks high among the States in the character of its legislation requiring the attendance of children on schools. The enforcement of this legislation is not yet satisfactory, in part owing to reliance upon purely local agencies for its admin-

istration and supervision, and in part owing to the confusion of jurisdiction as between educational agencies and those established to enforce labor legislation. In rural communities local attendance officers are embarrassed in attempts to punish violations of the law. Combining the function of attendance officers and school census enumerators would be a step towards more effective administration. There would result from this at least a complete registration of all persons of compulsory school age. Some form of State supervision is also essential; specific proposals as to which are made elsewhere (pages 74 and 119).

EDUCATION OF IMMIGRANTS.

The problems of educational administration grow in complexity as the population becomes more heterogeneous. Immigration, and the resulting gathering together of immigrants in certain towns and cities because of economic and social conditions, make it extremely difficult to maintain right standards and to enforce educational legislation. Where such a situation exists the State should contribute to the support of supplemental educational agencies, such as evening schools for adults, and should insure minimum standards of general education. Further discussion of these problems is found elsewhere (page 58).

STATE AID.

The Board of Education has several times shown that Massachusetts falls far behind other States in providing support, by the State, for education. The burden of the cost of public education is most unequally and inequitably distributed in Massachusetts. Some of the general problems involved are analyzed elsewhere (page 86).

ECONOMIC DECLINE OF CERTAIN TOWNS.

The opening of agricultural land in the west, and the improvement of transportation facilities upward of half a century ago, marked the beginning of an economic decline in some towns of the State which has continued to the present time. The effects of this on the public schools has been very bad. Standards have remained low, and great injury is being done to the children, for which eventually State and country as a whole must suffer.

FREE HIGHER EDUCATION.

Attention has frequently been called, in recent years, to the comparative absence in Massachusetts of facilities for higher education available to those persons unable to pay tuition fees. This need has been met, in part at least, by the enactment of legislation in 1915 providing for a Department of Extension Service under direction of the Board of Education, but this will offer only slight relief to young persons ready for a college education but unable to pay tuition fees. In 1915 the Board submitted to the Legislature a bill providing for free scholarships in existing colleges, but it failed of passage.

EDUCATION OF PHYSICAL DEFECTIVES.

One of the few educational functions to be developed under State auspices in Massachusetts is the care and training of physical defectives. The State now maintains schools for crippled and mentally sub-normal children. Private agencies for educating deaf and blind children are given State aid. These agencies do their work well, but do not cover all parts of a field which is yearly growing more varied and extensive. Furthermore, adequate provision is not now made for a great variety of partial defectives whose education is not or cannot be provided for in existing public schools, but whose condition is not sufficiently serious to justify commitment to an institution. Some of the problems involved are discussed elsewhere in this report (page 62).

III. Summary of Existing Conditions Favorable to Educational Administration in Massachusetts.

The development of educational administration in Massachusetts will be greatly facilitated by public interest already awakened, legislation enacted and administrative conditions established. An adequate inventory of these factors includes at least the following: (1) community interest and confidence in public education; (2) school legislation already enacted; (3) existing educational customs and traditions; (4) local administrative machinery; (5) facilities for training elementary school teachers; (6) teachers' retirement system; (7) the system of

State-aided vocational education; (8) legislation for medical inspection of schools; (9) free text-book system; (10) length of school year; (11) method of appointing State boards.

PUBLIC INTEREST IN EDUCATION.

Local public interest, one may grant, has constituted the principal influence in the development of the public school service in the past, and a continuance of that interest is essential to further advances. Proposals for new legislation or for changes in administrative agencies must be considered in the light of their probable influence on such local public interest. The extent to which, under changing economic and social conditions and the introduction of new racial elements, such interest will continue to develop naturally, is a problem of the future. Probably special means of publicity must be devised to keep active this interest in education and rightly to direct it. Popular belief in the efficacy of public education as a means for promoting social well-being, largely a faith in the past, will gain greatly through being transmuted into conviction based upon tangible evidence.

SCHOOL LEGISLATION.

The existing body of general school legislation in Massachusetts, because of its exhaustive and tested character, constitutes an exceptionally solid foundation for further educational advances. To an extent rarely equaled elsewhere the Commonwealth has persistently crystallized into legislation, usually specific and clear, not only the ripened convictions, but often, also, the aspirations, of school administrators and of the friends of public instruction. It is true the enforcement of this legislation frequently has been lax and inadequate, either because of incompetent local administrative agencies, or because such legislation has seemed to make unreasonable and excessive demands on certain communities. This condition gives rise to certain problems of supervision yet to be solved.

EDUCATIONAL TRADITIONS.

Massachusetts possesses, also, an exceptionally rich fund of customs and traditions as to public education, some of which, it must be confessed, exercise a retarding and nullifying in-

fluence on proposals for a more scientific development of means and methods, but many of which in reality constitute positive factors towards such development. The general readiness of men and women of ability and standing to accept service on school committees; the friendly and at the same time critical attitude of parents towards the work of the schools; the prevalent disinclination to permit political or religious controversies to influence school administration; and especially a wide belief in the advantages of all forms of education, — these constitute a part of the heritage of popular education in Massachusetts, capable of being strengthened, and indispensable to further developments.

LOCAL SCHOOL ADMINISTRATION.

The local administrative machinery for public education in Massachusetts is surpassed by that of no other State. The superior elements in this machinery are: the town as the unit of administration; the school committee, usually consisting of three, and rarely of more than six, members elected by popular vote; the requirement that the schools of each town shall be directed by a superintendent of schools who usually has definite professional equipment for his work; and the increasing disposition of school committees to permit and require that the superintendent shall serve in a genuine sense as an executive officer. Weak points still exist in the system of local administration of schools in Massachusetts, some of which are now in process of being remedied under the advice of agents of the Board of Education, and some of which can be removed only by fundamental legislation.

TRAINING OF TEACHERS FOR ELEMENTARY SCHOOLS.

No other State, except Rhode Island, surpasses Massachusetts in facilities for the training of elementary school teachers. The 9 general State normal schools of Massachusetts now graduate approximately 800 students a year. These supply substantially 70 per cent. of the annual demand for trained teachers. The State could not yet meet its own needs if it were not for the annual immigration of a supply of competent teachers who have had experience or professional training or

both in neighboring States. The one conspicuous new need in this field of administration is, as stated elsewhere, the provision of special facilities for the training of men for elementary school positions. Problems involved in rendering the present schools more efficient are discussed elsewhere (page 64).

RETIREMENT SYSTEM FOR TEACHERS.

In 1914 legislation was enacted creating a compulsory retirement system for public school teachers in Massachusetts. On its administrative and financial sides this system has been pronounced by competent authorities the best in the United States. There is every reason to believe that one effect of this retirement system will be to improve, slowly but surely, the quality of the teaching force in the public schools.

VOCATIONAL EDUCATION.

In 1906, and again in 1911, legislation relative to vocational education was enacted, which furnishes a sound and comparatively effective basis for the development of systematic training and instruction along agricultural, industrial and homemaking lines. The problems of perfecting the existing system of vocational education, especially on the pedagogical side, are discussed elsewhere (pages 40, 46, and 165). Commercial vocational education is still supported and supervised locally, with the result that in large and prosperous communities good vocational commercial schools may be found, while in other communities they are still comparatively weak and inefficient.

MEDICAL INSPECTION.

In 1906 comprehensive legislation requiring medical inspection in the schools of Massachusetts was enacted. Ample provisions are made in this law for the beginning of an effective system, and some prosperous communities have already achieved good results under its operation. In general, as noted elsewhere, it is the legislation only that is now satisfactory; its enforcement and administration await the development of State supervision. There exists now in most towns and cities an almost complete lack of sound general standards and of commonly available knowledge as to the best means and

methods of medical inspection in schools. The problem of meeting this need through adequate State supervision is discussed elsewhere (page 75).

FREE TEXT-BOOKS.

In 1884 legislation providing for free text-books in the public schools was enacted, which has resulted in an increase in the number of children able to prolong their attendance in school, and, more important still, in a substantial addition to the actual number of days' effective teaching, because all pupils are supplied on the opening day with necessary books.

LENGTH OF SCHOOL YEAR.

Massachusetts holds high rank among the States of the Union in the requirements both by law and by custom as to a full school year. A minimum of one hundred and eighty days' actual schooling a year is given in substantially all towns and cities. The law requires that high schools shall be in session forty weeks, — a standard equaled in but one or two other States. Probably even more schooling will be required and provided in the future; certainly there are in prospect a longer year for vocational schools and provision for special educational facilities during the summer vacation for children who do not leave their homes.

SUPERVISORY BOARDS.

Apart from special boards or commissions — as the board of trustees of the Agricultural College, textile schools, and schools for defectives and delinquents — the State agencies directly or indirectly concerned with education are the Board of Education, the Department of Health, the Board of Labor and Industries and the Board of Charity. While it is true that in a variety of respects the educational functions and responsibilities of these boards are ill defined and incomplete, it is also a fact that the legislation creating them, and the means of insuring good membership on them, are better than those commonly found in other States. Some problems connected with the definitions of the powers of these Boards are discussed on page 83.

IV. Some Specific Needs of Educational Administration in Massachusetts.

For the purpose of indicating more specifically some of the readjustments and developments required in educational administration in Massachusetts, separate consideration is given below to a number of the departments or fields of public education as now found. Definite improvements in any department under consideration may require one or more of the following procedures: (*a*) a more extended analysis than is now available of the aims, based upon a close study of the principles of a sound social economy, which should control in all proposed modifications and extensions of the public school system; (*b*) legislation additional to that now on the statute books; (*c*) reorganization of the existing machinery of administration; (*d*) more clearly defined ideals and standards of attainment as formulated in programs, courses of instruction and administrative regulations; (*e*) more scientific and adequate definition of proposed means of realizing desired ends; (*f*) better technical equipment of the various specialists responsible for educational administration; and (*g*) more adequate financial support, the burden of which shall be adequately distributed over the State as a whole.

ELEMENTARY EDUCATION, LOWER GRADES.

Elementary education for children from six to twelve years of age (the first six grades) is now more soundly and effectively organized than is any other corresponding field. Legislation is fairly adequate except as regards (*a*) provision for assumption by State, as a whole, of part of the cost of support in poorer communities; (*b*) provisions for the certification and after-training of teachers; and (*c*) enforcement throughout the State of at least minimum general standards of quality of schooling.

The effectiveness of elementary education will be materially increased when certain measures of administrative reorganization, generally approved by educators, and now under way in a number of communities, shall have been accomplished. These include: (*a*) assembling in central intermediate or junior high

schools all children over twelve years of age, and thus arranging that the lower elementary or primary schools, exclusively under the direction of women teachers, shall be small schools, each near the children's homes and each with its own playground; and (b) expert primary supervision whereby an experienced and well-trained supervisor can be provided for each group of 50 to 70 elementary teachers. The large majority of these teachers in Massachusetts as elsewhere will, for many years to come, consist of young women, recent graduates of normal schools, earnest and energetic, but with only moderate professional initiative, who must look to the supervisor (who should be an assistant to the superintendent of schools except in thinly settled communities, where the superintendent must perform this function) and to adequate after-training through summer schools for the direction and definite equipment which will yearly increase their competency during their relatively short professional careers.

INTERMEDIATE SCHOOLS.

In contrast with the grades 1 to 6, where so much has been accomplished during the last twenty-five years to provide effective administrative conditions, the work in grades 7, 8 and 9 in American public schools is still, in the main, badly organized and administered. Many educators now agree that controlling purposes for these grades (for pupils from twelve to fourteen years of age) are vague and often misleading; that the teachers here employed have not been suitably trained for their work (in reality normal schools train chiefly for teaching grades 1 to 6); that courses of instruction are at once inflexible and overcrowded with different studies; that supervision is inadequate and ill directed; that methods of instruction are commonly based upon no adequate knowledge of the actual learning capacities of these pre-adolescents; and that the excessive proportion of women teachers and the association of these grades with the primary grades create conditions where further improvement is doubtful, if not impossible.

To bring the education of American boys and girls of from twelve to fourteen or fifteen years of age up to desirable standards (as has been done in other countries) will be a long and difficult task. There is need of an extensive and scientific

analysis of the aims which should govern in the effective work to be given during puberty. Text-books and courses of instruction must be shaped in the light of pedagogical principles as yet only foreshadowed. A wide range of studies, as well as more flexible programs adapted to different groups of pupils, must be available. Teachers for these grades should specialize along the lines of their greatest teaching capacity.

To realize these ends certain departures from the traditional organization of elementary schools are essential. Some of these changes have been discussed in previous reports, and one has been hinted at in the previous section of this report. In brief, the older pupils in our elementary schools should, as far as possible, be gathered into central schools, where departmental teaching and flexible courses can be provided. Programs of instruction suitable for these intermediate schools are discussed on page 140 of this report. The creation of intermediate schools or junior high schools in central locations for all children over twelve years of age is essential to other administrative changes to be expected as educational demands become more exacting and knowledge of how to meet these demands is accumulated. In the central intermediate school departmental teaching may be expected to demand and attract men teachers; inducements will be offered in all departments for teachers of more adequate professional preparation than can now be obtained, and as a consequence normal schools will develop more effective programs for such training; and retarded pupils, whose needs are urgent because they are nearing the end of their school career, will have better opportunities for a useful education than are now available.

In rural communities the intermediate school may well be associated in management and location with the high school. In urban communities it should be near the high school, but, as conditions are, probably should be under separate management.

For the development of the intermediate school in Massachusetts probably no additional legislation is needed. Existing buildings in many communities are not suitable for this type of school; but if school authorities have a clear conception of what is to be done, they will find it practicable, as population

increases and additional buildings are required, to evolve a complete scheme of reorganization of schools into elementary schools for the first six grades, and intermediate schools.

A fully reorganized system of elementary education as outlined above will not result in increasing the cost of schooling in the lower grades, but will probably increase somewhat the per capita cost of that in the upper grades. Men teachers should be employed exclusively for certain lines of work, who must be paid somewhat higher salaries than women teachers now receive, especially in such fields as physical education, practical arts and civics. The equipment of an intermediate school will be more varied and costly than that now found in the customary upper grades. The use of administrative devices may somewhat decrease cost in other directions. For example, a larger number of pupils can be accommodated in a given space than is now the prevailing practice, through the use of rooms for more than one section (a plan which has been successfully applied in Gary, Ind.). Whether advanced pupils could serve as assistants in various departments has not yet been determined, but it is suggested that there are probably large possibilities in this direction. Some increase in cost is inevitable. Hence the desirability, as well as fundamental justice, of a partial equalization, by means of State funds, of the cost of the support of public education, is again emphasized.

SECONDARY EDUCATION.

The present is a period of marked unrest in the field of secondary education. Attendance on public high schools in Massachusetts has kept pace with the rate of increase in such attendance throughout the country, — a rate almost three times as great as the rate of increase of population. One effect of recent child labor legislation in Massachusetts is materially to increase the number of pupils who enter the high school and remain but two or three years. The development of vocational education during the last dozen years has brought into relief the function of the general high school as an agency of liberal education, including mental training, personal culture, education towards citizenship, and physical education. Careful students are convinced that the general high school of

the future must differ materially from any existing institution of that type. A few high schools under progressive leadership are even now pointing the way whereby the general secondary school of the future may be a far more effective agency for liberal education. A survey of the problems involved was given in the seventy-seventh annual report of the Board of Education.

The Board of Education now exercises a substantial advisory direction over high schools in two respects: legislation enacted in 1914 requires the Board of Education to define the standards of a legal high school in a town required to belong to a superintendency union; secondly, the Board determines the conditions on which a high school is approved as privileged to grant certificates so that its graduates may enter a normal school without examination. Since the number of graduates annually admitted to normal schools approximates 1,200, this function of the Board constitutes an important phase of supervision of secondary school curricula. The officers of the Board do not primarily seek to prescribe what high schools shall do, but rather to co-operate with and assist superintendents and principals in devising better standards. It is not advisable to encourage high schools to do much experimental work in fields where standards are yet undeveloped, but the agents of the Board may well assist a few selected schools in experimentation on specific problems along lines which have already received prolonged and careful consideration. Accordingly, the agent of the Board for secondary education is now supervising the preparation of manuals on recommended courses of study in such subjects as community civics and general science. Eventually other phases of secondary education will be included, so that within the next decade, if the efforts of the Board of Education are properly supported, the entire field of the general high school will be carefully reviewed, the experience of other States taken into account, and a program of secondary education more effective than any now existing in Massachusetts finally be developed.

Meanwhile, certain definite needs should be met. Under the auspices of the Board of Education, or otherwise, an effort should be made to define more adequately liberal or general

education as a function of the high school. In connection with this inquiry, probably as one phase of it, a detailed analysis of the meaning of the term "training for citizenship" should be made. Standards in these fields are empirical, vague and ineffective. The result of such study and investigation should be a clearer statement of the valid aims of the general high school.

Both legislative and administrative action are necessary if existing high schools are to be in a position to develop in accordance with the best knowledge of the aims and methods of secondary education. Legislation should be enacted giving special grants to high schools in smaller communities, as legal provisions for financial aid are now entirely inadequate.

Representatives of the Board of Education have held two conferences with representatives of the colleges of Massachusetts, at which propositions were submitted on such a readjustment of college entrance requirements that the effect of these upon the existing high schools might be as constructive and helpful as possible. This subject was discussed in the seventy-eighth annual report of the Board of Education.

Again, careful consideration should be given to the proposal of adoption throughout the State of a two years' general course in high schools, especially designed for pupils who are likely to leave school at about sixteen years of age. At present, unsatisfactory provisions are made for this large group of pupils. Existing programs of instruction are ill adapted to their needs. Little if any effort is made to ascertain these needs. The commissioner holds that a two years' course of liberal education should be offered in each high school, on the completion of which the student should receive a certificate or diploma. While this course, as far as practicable, should be identified with the four years' course as to its specific subjects, its aims should be radically different.

VOCATIONAL EDUCATION.

Massachusetts has been a pioneer among the States in organizing comprehensive programs of vocational education for persons from fourteen to twenty years of age. Before 1906 the only available vocational education, apart from higher

technical and professional training, was that offered by public and private commercial schools, located usually in cities, and courses in a few trade schools conducted as philanthropic or business enterprises. It was formerly seriously questioned whether public funds should be used to support industrial and agricultural education of a practical character. Within a decade public opinion has changed, and there is now little opposition to public support and control of vocational education of any and all kinds.

Many problems remain to be solved as to the scope and character of the vocational education that will best serve the interests of the individual and of society. Massachusetts has as yet no satisfactory means of training workers for great manufacturing industries producing textiles, jewelry, boots and shoes and other articles the production of which involves minute subdivision of processes. Apprenticeship is admittedly less effective than formerly as a means of training workers. The establishment of standards of efficiency in occupations, and the definition of the scope and character of training that should be given in schools to pupils of specified ages, constitute essentially new problems for society. Industry, on the whole, partly because of internal changes in its general administration, and partly because of an increasing use of labor from outside sources, — whether other States or abroad, — is in most of its branches apparently less capable than formerly of conducting vocational education. Prominent exceptions are found in the printing industry and in special departments of a few other industries where the corporation school has been developed. But an examination of most of the great industries of America, such as textile manufacture, clothing production, agriculture, mining, building trades, food packing, transportation, and the innumerable forms of metal manufacture, will reveal few evidences of disposition or ability either to revive apprenticeship or to substitute therefor other forms of systematic vocational training.

That the American system of public education must so expand and diversify its organizations as to make extensive and real provision for vocational education is now a foregone conclusion among most students of this subject, whether edu-

cators, social economists or business men. The cost of providing such education will to an increasing extent be regarded as a profitable form of social investment. The numerous problems of ways, means and methods remaining will hereafter demand our chief attention.

One of the most difficult of these problems grows out of the economic needs of young persons who desire to be trained for a trade or other occupation, but who at the same time are obliged to aid in their own support. Boys and girls may now leave school at fourteen, but most industries will not admit them to the introductory stages of work of a progressive character (that is, leading to positions requiring skill, responsibility and mature intelligence) until they are at least sixteen. Under present conditions attendance on a vocational school should occupy the years from fourteen to sixteen, but as pupils of these ages can earn little during this period, many of them must forego the opportunities of systematic vocational education at a critical period in their lives.

Experience thus far in vocational education gives a reasonable basis for the establishment of the following as principles which may be expected to control in a complete program of vocational education designed to afford every individual an opportunity to become proficient in an occupation, and also to furnish exceptional individuals opportunity to advance to positions of leadership or to enter occupations requiring maturity or exceptional power:—

(a) During the later years of the period of compulsory school attendance, and for at least two years thereafter, courses will be provided in the regular public schools which, while designed primarily to offer a liberal education (that is, the formation of cultured personality, training toward citizenship, development of physical powers, and equipment in the few intellectual arts, such as reading and writing, which have general application), will provide also, on an elective basis, a variety of opportunities for participation, somewhat in the spirit of the amateur, in the easier phases of practical occupations. Through such participation it may be expected that pupils will discover special vocational interests and capacities, and acquire some appreciation of the requirements and standards of occupational fitness.

(b) For youths who have passed beyond the ordinary period of compulsory attendance on a day school of general education, "all-day" schools for vocational education along specific lines will be provided to an increasing extent. Here shop processes (the word "shop" including workshop, farm, office, home or other place of resort for practical work) will be definitely reproduced in their simpler phases for a large proportion of pupils, otherwise qualified, who are over fourteen years of age. For other occupations — possibly stenography, carpentry, weaving and molding — the lowest age of entry may have to be sixteen. For still others — teaching, steam engineering and field salesmanship — the age may be eighteen.

(c) Attendance on the all-day vocational school will be followed by part-time instruction, whereby the pupil will ordinarily divide his time between the school and the wage-earning occupation for which he is being trained, such participation in industry being under the oversight of the school. The transition to a part-time arrangement may be made in some industries only a few weeks after entering on the all-day school. In other cases it may come after two, or even four, years spent in such a school. The length of time to be spent in the all-day school, preliminary to entrance on a wage-earning calling on a part-time basis under the direction of the school, will vary greatly according to the kind of work, the capacity of the learner, the co-operative attitude of employers, and conditions in the local labor supply. In general, this period should be short rather than long, partly because of the expense of the all-day school, and partly because no all-day vocational education can prove as effective as a part-time program if all the work of the pupil sharing in productive work is supervised primarily with the object of making him vocationally competent. An all-day vocational school can indeed be made nearly as effective as part-time education, but only at the cost of building up in the school a vast enterprise of economic production operated under such pressure for productive efficiency as will insure a fairly faithful reproduction of the conditions of competitive industry, whether that be manufacturing, transportation, mining, office administration, farming or home-making. All this is practically impossible for most industries on any scale commensurate with the varieties of vocational edu-

cation required, because of the attendant initial cost of equipment, and the perennial cost of replacing old machinery by new and improved machinery.

The successful working of the part-time plan will require that the pupil be given employment primarily for the sake of the education to be offered, and only secondarily for the wage, as has always been the case in true apprenticeship, and will ultimately involve compulsory attendance. There must be coordinators between the school and the shop who can insure the educational integration of the practical experience with the school instruction.

(d) This part-time program of vocational education will be extended to another form of part-time arrangement, by which workers, mature and ready for full wage earning, will be given opportunity for continued instruction in evening schools, short courses, "dull season" courses, extension courses, correspondence courses and the like, attendance to be voluntary, and the instruction as far as practicable being related to the requirements of the occupation.

It is contended that the principles of vocational education, as laid down above, might well apply to preparation for any and all callings, and that all certificates, diplomas and professional degrees should be issued only after the recipient shall have met the theoretical requirements of the calling as imposed by the school, and in addition, its simpler practical requirements as imposed by the actual working conditions of the occupation itself. Exemplification of this proposition in certain engineering and other professional lines has been given by Cincinnati University, under the inspiration and direction of Dean Schneider. The Massachusetts plans for teaching farming to boys and homemaking to girls apply these principles rigorously. Their application in colleges of agriculture, schools of journalism, commercial schools, and, in fact, almost every type of vocational school, is entirely feasible. The diploma, certificate or degree issued under these conditions would have value in the world of practical affairs, which it does not now possess.

The realization of such a program of vocational education awaits chiefly the development of courage and resourcefulness

on the part of educational administrators. Innumerable minor difficulties will be encountered which may well appear insurmountable as long as no clearly defined principles are made the basis of definite and detailed plans. For example, the execution of plans for part-time homemaking education, based upon the close co-operation of the home in all the practical phases of such training, has been delayed at times by fear that mothers would not be willing that teachers or co-ordinators should come to their homes. The effective policy would be, of course, to organize a sound program of work in homemaking schools, including required activities in the home, and then to admit to such schools as pupils only those applicants whose parents were prepared to co-operate. This plan has already been followed in the case of very successful schools of farming and gardening. It can easily be done in training for the trades, office pursuits, salesmanship and for many professions.

We need a better understanding of the "dead end" and "unskilled" occupations in our future discussions of vocational education. More elaborate organization, the application of science and invention to industry, and the larger use of capital have caused the historic trades to be indefinitely subdivided, modified or replaced by quite different pursuits. As a consequence many lines of work have developed which are entirely within the capacities of young and unskilled labor. The *laissez faire* policies of many modern industrial societies are responsible for the neglect of the educational needs of these youthful workers, often attended with harmful consequences. Inherently, there is nothing objectionable in productive occupations so simplified and so specialized as to yield a large and valuable product to the youthful or unskilled worker. Rather is the world to be congratulated because machinery, capital and organization have made possible such utilization of all forms of productive effort. But it is a responsibility of society to see that each worker, youthful or not, is given free opportunity, and is eventually, if necessary, required to enter superior stages of industry, and to prepare himself therefor according to his capacity. Any other course must be obnoxious to the true spirit of democracy, which seeks to make the most of

men and women in respect to all their powers, and which cannot permit the moral, mental or physical dwarfing of its citizens.

For the immediate future no legislation of a comprehensive or radical nature is probably necessary in Massachusetts to promote the development of vocational education. The underlying legislation and the administrative organization are both now satisfactory in this State as regards essentials. More detailed programs of administrative procedure must be worked out as experience and experimental attempts point the way. Existing vocational schools in Massachusetts, while probably unsurpassed, still obviously fall short of the highest efficiency. They stand, relatively speaking, aloof from the industries for which they are supposed to train. Their standards of accomplishment are indefinite and not co-ordinated with actual possibilities in the world of practical effort. Our vocational schools, in many essential respects, still hark back too much to the traditions of academic schools, and consider too little the sound and enduring requirements of the learners themselves as prospective workers in productive occupations. They do not sufficiently discriminate among their several aims so that while giving principal attention to their primary responsibility of producing vocational competency they may also seek to provide, as an essential though secondary aim, such instruction as shall promote physical welfare, cultural interests and capacity for intelligent and responsible citizenship.

CONTINUATION SCHOOLS.

By continuation education is here meant any education either general or vocational, taken for only a few hours per week by young persons already employed. It is therefore a special form of part-time education. Continuation schools were long ago developed in Germany, but only recently in this country have States, such as Massachusetts, Wisconsin, Pennsylvania and Ohio, enacted legislation making continuation school attendance permissive or required for young people under sixteen years of age. The Massachusetts law permits communities to establish continuation schools, and gives the Board of Education authority to require attendance on such

schools whenever they are believed to be efficient. The time must come, in view of existing conditions, when continuation school attendance should be required throughout Massachusetts.

An important question in this connection is what portion of the pupil's time should be taken by the continuation school. The minimum amount now required in Boston is four hours per week, but recent legislation enacted in Wisconsin imposes a requirement of not less than eight hours per week for thirty-two weeks in the year, or six hours per week for a period of forty weeks. This question is closely involved with another which has long been under discussion in Massachusetts, namely, the extension of the period of compulsory attendance on the regular public schools. Proposals have several times been made for the extension beyond the age of fourteen of the period of complete compulsory attendance on full-time day schools for all pupils. The Board of Education has not supported these because of doubts as to the wisdom of the policies involved. But serious consideration should now be given to the question as to whether legislation should not be enacted providing that employed children fourteen to sixteen years of age shall work not over five hours per day for not more than six days per week (a maximum of thirty hours per week), and that all such children shall also attend school for not less than the equivalent of three hours per day, or a minimum of fifteen hours per week.

Existing legislation provides that the hours of labor for young people under sixteen years of age shall not exceed forty-eight hours per week, or eight hours per day. But this requirement is a serious inconvenience to establishments where employees under sixteen work together with those over that age. A five-hour working day would probably result in a double-shift arrangement for younger workers in most establishments, which would be nearly as acceptable as the present arrangement and would insure conditions much more favorable to the education of young people than now exist.

Programs of effective education for pupils in continuation schools are in process of experimental development in Boston, Cincinnati and in the cities of Wisconsin and Pennsylvania. In

the two States named continuation school attendance is now compulsory. The essential principles to be applied in these programs are now fairly well established.

KINDERGARTEN AND SUBPRIMARY CLASSES.

The education of children under six years of age has always claimed the sympathetic interest of many persons in Massachusetts. Boston and other cities in the Commonwealth early responded to the demands for public kindergartens. At one time several State normal schools had departments for the training of kindergarten teachers. The growth of city population and the increasing proportion of foreigners apparently made the need even more acute.

But municipalities have not multiplied kindergartens as sympathizers with that form of education have wished. Massachusetts has now many more kindergarten teachers than can find employment. The fact that kindergartens are found chiefly in richer communities suggests that this form of education is still regarded largely as a luxury rather than a necessity.

The obvious indifference of the public to a more comprehensive development of facilities for the education of children under six may be due to either or both of two causes. The first is the expense. Many towns and cities find themselves taxed to the utmost to support elementary and high schools. If additional resources were available the first effort would be to improve existing schools through a reduction in size of classes and increases in salaries of teachers. Hence the kindergarten, like manual training and household arts, not being required by law, is looked upon as an educational luxury only for the richer communities.

The second possible reason is more fundamental and involves the question as to whether the aims and the field of the kindergarten have been defined to the satisfaction of educators. It was not unreasonable, at first, that these educators should be asked to accept the kindergarten on faith. But it is now urgent that information of a scientific character and analyzed in some detail should be available as to the place and possibilities of this type of education in a public school system. It is widely assumed that the chief value of the kindergarten is to

compensate for deficiencies of home environment. Such assumption implies that an ideal environment for the growth of young children has been described, actual deficiencies of particular environments analyzed, and the compensatory functions of kindergarten based on such analyses. There is doubt as to whether this has been done in such a way as to suggest practicable programs for given conditions. Hence in Massachusetts, cities having conditions of environment least favorable to the normal growth of children have usually the fewest kindergartens. This is a situation certainly inconsistent with the most widely held justification of the kindergarten.

On the other hand, the contention that the kindergarten has positive educational functions, quite independent of environmental conditions of the child, raises many questions as to what are the tangible results of this form of education, and how it co-ordinates with other forms of education for children living in a wholesome and normal environment. It is possible that the shifting of discussion in this field from the stage of faiths and beliefs to a plane of scientific thinking, where facts and probabilities can be studied, is essential to the further development of kindergarten education in Massachusetts. Only on that basis can the State aid necessary to its widespread support be procured.

In the meantime special attention should be given to what is currently called subprimary training, which, while employing some kindergarten methods, must, on the whole, have aims different from those urged on behalf of the kindergarten. Formerly elementary courses of instruction in most Massachusetts municipalities were nine years in length, with the provision that children five years of age could be admitted to the first grade. In recent years, as a measure of economy and efficiency, the eight-grade system is becoming general, with the stipulation that the age of admission shall be about six. For children of English-speaking parents living in good environments this plan works well. There is no material loss when children thus situated must be six years of age before admission to the first grade.

When, however, children live in crowded quarters, and especially if the language of the home be foreign, or else poor English, a twofold gain results from admission at five to a so-

called subprimary class. The school will provide for a few hours each day a better environment than the street, and a moderate amount of systematic training will give to the pupil such command of English and training in school behavior in general as to enable him, after entering the first grade, to keep pace approximately with more favored classmates. Further development of the subprimary class, therefore, as an adjunct of the eight-grade system is of the utmost importance.

No special State aid need be given for the support of subprimary instruction. It should be aided, if at all, as a part of the regular public school system. Furthermore, no additional legislation and no great reorganization of administrative machinery is required in establishing subprimary classes.

STATE AID FOR HIGHER TECHNICAL EDUCATION.

Almost all forms of higher technical education in Massachusetts are aided by State funds. Some of the institutions offering such education, such as the Massachusetts Agricultural College and the Nautical School, are controlled directly by boards appointed by State authority; others, privately controlled, are subject to some degree of public oversight. These include the three textile schools, the Worcester Polytechnic Institute and the Massachusetts Institute of Technology.

Probably these institutions can meet for many years to come the needs of the State for most forms of higher technical training. At least two additional departments should be developed, either within existing institutions or independently, — namely, one on the technology of paper making, and the other on the technology of leather products. The need of such departments is manifest, and probably State aid should be provided for their development. It is sometimes proposed that they should be located in an existing institution, — a desirable plan, certainly, from the standpoint of economy and administrative efficiency. On the other hand, there are many reasons why each form of technological instruction should be located in a large center of the industry for which it gives professional preparation, as many of the best students for such a school will be able to attend evening classes only. Again, there is a strong disposition to develop part-time programs in many

fields of professional, as in other forms of vocational, education. The part-time arrangements can best be effected when school and industry are in close proximity. Finally, there is little doubt that, apart from considerations of evening courses for workers and part-time instruction, professional education of the highest type thrives best in an atmosphere of practical achievement in the field for which preparation is being given.

The Legislature should soon authorize the Board to study the needs of these two proposed forms of technological education, and give it the means necessary to procure expert service and enlist the co-operation of the leaders of the industries involved.

The question of State supervision and co-ordination of effort among institutions of higher technical, as well as other forms of education will be a disturbing one in Massachusetts until it is settled in accordance with sound principles of administration. The Board of Education has already submitted two special reports on this subject, in which it has recommended legislation which is believed to be sound in principle. The essential conclusions reached in these reports were: —

(a) Where State aid is given to any form of education, the central State educational authority should be empowered and enabled to study and report as to the use made of such aid, to the end of ascertaining that, on the one hand, such money shall have been wisely expended, and, on the other hand, that there is no needless duplication of effort, nor lack of due co-ordination of effort, attributable to the fact that independent administrative bodies are directing special forms of instruction.

(b) The control and direction of special forms of education by boards of trustees or by corporations is a valuable means of promoting sympathetic popular interest in each such special form, and in bringing to bear on its administration the influence of men practically and vitally interested in its standards and results.

(c) Therefore it would be equally unwise (a) to leave the entire administration of such education to special public or private boards, the acts of which are subject only to occasional review by the Legislature, or (b) to place it completely under the charge of a central administrative authority having many other responsibilities. A combination of administrative func-

tions is necessary whereby one agency may take the initiative in all administrative matters and another exercise supervision, the latter being made effective either through authoritative publicity or else through right of approval of measures initiated by the first agency. The Board of Education, in the reports referred to, held that under sound administrative conditions special boards should be required to submit detailed reports and estimates to the State Board, so that the latter, with the aid of expert service, could consider the work of the institution and its requests for appropriations, and submit definite recommendations to the Legislature to accompany those of the institution itself. Proposed legislation to give effect to these findings of the Board of Education was formulated in specific bills. These principles must be crystallized into legislation before the General Court can be satisfactorily advised each year as to the many requests annually made for special appropriations for particular forms of education.

THE MASSACHUSETTS NORMAL ART SCHOOL.

The next few years will constitute a period of reconstruction in the development of the Massachusetts Normal Art School. The growth of the school itself in point of attendance, in scope and variety of courses, as well as the restrictions imposed by its surroundings, compelled the taking of steps for the removal of the school to a new site. The Board has required that the proposed new site shall be ample to provide for the expansion of the school to meet the needs of Massachusetts for many years to come, as regards the particular forms of education suitable to be developed in this school. The new building, for which an appropriation is asked of the Legislature of 1916, is designed to provide only the facilities needed to accommodate the types and scope of instruction already established.

The present program of work is in itself significant of fundamental changes in progress in the field of education peculiar to the Normal Art School. The aims which should control in this field of education are receiving clearer definition, and such definition is most vital for the future expansion of the school along sound lines.

The Normal Art School was founded in 1873, largely as a result of the same aspirations and convictions that had led,

about twenty years earlier, to the establishment of the so-called South Kensington movement in England. The early advocates of both new forms of publicly supported education were convinced that the teaching of drawing and other forms of art applied to industry could be made to aid greatly in the industrial development of the peoples and countries offering such education. Then, as now, it was easy to recognize that States and nations are industrial competitors, and that commercial primacy goes to the people that can secure most abundantly skilled labor, technical knowledge for direction, and other personal elements of efficiency. All available reports of the transactions connected with the founding and early development of the Normal Art School indicate that its establishment as a free State school was designed, in addition to the training of special teachers of drawing and related subjects, to render to the State services analogous to those given by the higher technical schools, nearly all of which are now aided in whole or in part by State funds. The chief function of these schools is to train persons who, as the term is often loosely used, may serve as leaders,—leaders not so much in the sense of organizers, managers and superintendents, as of experts technically qualified to provide the plans, directions, designs, inventions and formulæ essential to all extensive and complicated industrial work.

Now it is evident that industries generally require for adequate development not only chemists, engineers and other specialists qualified to organize and apply scientific knowledge, but also require in large measure those whose ability to apply knowledge of and talent in art to industrial production entitles them also to be classed as experts. Fully equipped specialists in the various arts of design, draughtsmanship, decoration, artistic handicraft and illustration are always in demand. The economic and social reasons for giving at least some of these specialists advanced training at the expense of the State are similar to those urged in favor of free higher education for engineers, agriculturists, navigators, chemists and architects, and, in a different field, for officers for the army and navy and for teachers.

Many of these higher technical institutions have shown a gradual modification of their courses of study from general scientific education to the highly specialized training in which

they now render service to the Commonwealth. The Normal Art School is passing through the same transition in its development toward a clearer definition of its field of service. In large measure the later development of applied art education is due to the greater complexity of the fields involved, the important part which native taste and talent play in the making of the artistic designer and craftsman, and, perhaps, no less to the backwardness of America in recognizing the possibilities of this native power in the development of such specialized service.

The possibilities of the further development of the Normal Art School is believed amply to justify the large investment now being asked on its behalf, but, like all institutions in process of development, the school faces certain problems which must be solved in the near future, among which are the following:—

(a) A name must be found for the school more expressive of its entire purpose. Its present name is inadequate and misleading.

(b) The school must develop detailed plans of work. It must also develop, and use consistently, a terminology exactly descriptive of its aims and practices.

(c) The further and more exact definition of the aims of the various courses is of fundamental importance.

(d) The extent and character of the service that can be rendered by the school to the State in any particular field should be analyzed in the discussion of the aims of that department.

(e) The extent and character of desirable and feasible co-operation of the school with productive enterprise in producing a genuinely efficient type of service have as yet been only partially investigated, and opportunities for only a few carefully planned experiments to test certain phases of this problem have been undertaken. It is generally admitted that successfully trained specialists in the various arts of design, craftsmanship, decoration and artistic handicrafts must have experience in technical processes and knowledge of production no less than in artistic power. More extended forms of part-time arrangements than those already undertaken should be effected to accomplish these most desirable purposes.

A full discussion of these problems will be presented to the Legislature in a special bulletin now in course of preparation. It is clear that little additional legislation and little change in administrative practice are required for the further development of the Massachusetts Normal Art School. The foundation of the principles on which its work should be based, and the devising of detailed authoritative programs for carrying these principles into effect, are its real needs at present.

UNIVERSITY EXTENSION AND CORRESPONDENCE TEACHING.

The establishment by the Legislature of 1915 of a Department of University Extension and correspondence teaching, under the direction of the Board of Education, marks an important development of public education in Massachusetts. For some years a number of persons had been urging the founding of a State university to meet alleged needs for additional forms of education in the Commonwealth. The existing situation was examined by the Board, under a resolve of the Legislature of 1911, and a special report made in 1913, the findings of which were in substance —

(a) That Massachusetts is already abundantly supplied with accessible facilities for higher education, through endowed and State institutions, and that a State college of liberal arts or a State university for resident students is not needed.

(b) That it would be desirable and expedient for the State to assist needy students, through scholarships, to attend existing institutions, as is done, for example, in New York State.

(c) That, except in the Boston metropolitan district, facilities for extension teaching (university extension and correspondence courses) are available in existing institutions only to a slight degree, and these unco-ordinated; and that there is a substantial need of a system of extension and correspondence courses supported by the State.

(d) That, furthermore, there exists in Massachusetts no satisfactory means of connecting available expert knowledge and the results of research as found in institutions of learning with the potential demand for such service and knowledge coming from State and municipal administrative bodies; and that a central State agency could best render the service in this respect that is being offered elsewhere by State universities.

The legislation referred to above gives the Board ample authority to organize and maintain a comprehensive system of extension teaching, as well as to provide means for the utilization, by public service agencies, of expert knowledge now available in the various public and private institutions in the State. The future development of the Department of University Extension will probably be along the following lines:—

(a) Correspondence courses in large variety, vocational as well as cultural, will be made available for men and women in all walks of life. Means whereby applicants for such courses can be advised as to their probable capacity to profit therefrom will be devised. Personal contact between correspondence students and traveling instructors is capable of being developed with good results.

Where work of a necessarily elementary character is offered in correspondence courses, it will be specially adapted to the maturity of the student. Much of the work will be highly specialized along vocational lines, and will consciously utilize the basis of practical experience already possessed (as a prerequisite) by students. Facilities will be furnished for persons desiring to pursue liberal arts courses parallel to those offered by colleges. Teachers, business men, clerical workers, artisans, homemakers, farmers (for other than agricultural instruction, the latter being reserved to the State Agricultural College) and various other economic and cultural groups will be reached. Special instruction in methods of study suited to correspondence instruction will be given in the initial stages of the students' work. It is to be expected that arrangements will be made whereby credits earned through correspondence study will be accepted by schools and colleges which the students may later decide to attend. Writers of courses and readers of papers will commonly be selected from instructors in educational institutions on some form of part-time employment.

(b) Vocational and cultural classes conducted by part-time instructors will also be formed where sufficient demand exists. In time these courses may be as varied as those of the correspondence division.

(c) The experience of other States suggests the probability that lectures, singly or in series, as well as other similar forms of demonstrably valuable popular instruction, can be arranged

by the Extension Department. This work must supplement rather than parallel that offered by existing agencies.

(d) In time a special division should be developed to assist in making available for public officials, State and local, expert assistance of an advisory nature. The main object of this division would be to give references to sources of expert information, and rarely to supply such information.

(e) A special division for the assistance of public schools will probably be formed to circulate pictures; stereopticon slides, moving-picture films, materials for debates and the like. This action will be taken on the assumption that such materials can be made available only by a common service rendered to many schools, preferably through a State agency.

(f) It is clear, also, that the Department of University Extension will eventually co-operate with public libraries and utilize their services as a means of reinforcing and supplementing extension and correspondence courses through books supplied to students. The public service of the library itself will be promoted through such co-operation.

(g) A special division of what may properly be called extension teaching should be organized to teach English and elementary civics to adult foreigners. That effective courses of instruction for adult foreigners involve matters of pedagogy, administration and financial support which cannot properly be handled by any except the largest and wealthiest municipalities is now indisputable. That the State should assume large responsibilities in this field of education is obvious. Preferably a special department should be organized for this purpose under the direction of the Board; but it would not be impracticable to constitute it as a division in the Department of University Extension.

Extension teaching, indefinitely flexible, as it manifestly is or can readily be made, is designed to fill gaps left by existing endowed, commercial or public educational agencies, either as to types of instruction offered or as to individuals or groups of individuals to be reached. Departments of University Extension cannot be expected to enter into competition with existing agencies through offering types of instruction, either already required or made available in the public school system, or provided acceptably by private agencies.

THE EDUCATION OF IMMIGRANTS.

The education of immigrants who have passed the age of elementary school attendance, especially those from sixteen to twenty-five years of age, remains a greatly neglected problem. The report of the Commission on Immigration of 1914 presented clearly the need of a comprehensive plan for this educational service, and set forth in considerable detail constructive plans, with accompanying bills. The needs and possibilities of this situation may be summarized as follows:—

(a) The adjustment of non-English speaking immigrants to American social and economic conditions is greatly hampered by lack of opportunity to learn English, and to acquire some insight into American institutions from sympathetic and constructive sources.

(b) The adult immigrant usually constitutes a distinct and important asset to American economic life, the value of which would be still further enhanced if he could be assisted to a speaking and reading knowledge of our speech and literature, and to a helpful insight into American civic life.

(c) The proportion of the population of Massachusetts which is foreign born is now very large, and may increase. It is certain that the proportion of the population composed of non-English speaking foreigners and their direct descendants will steadily increase in New England; and while the public schools will do much in the Americanization of those who enter these schools as small children, nevertheless the influence of ancestry will also count for much, especially in moral attitudes and in general conceptions of the duties and responsibilities of citizens. For this reason, too, it is important that comprehensive measures should be taken to promote the intellectual development of adult foreigners as far as practicable.

(d) With the exception of evening schools in a few cities, Massachusetts makes no adequate provision for the education of these foreigners of from sixteen years of age upward. Despite existing legislation local communities cannot be expected to make such provision, partly because of the expense, partly because of inadequate means of administration, and partly because of local indifference. It is not just to ask local communities to bear all of the cost of this exceptional form of

education. A large population of foreigners in a community does not necessarily mean a great increase in taxable valuation. In fact, broadly speaking, the reverse condition often results.

(e) The proper training of adult foreign-born Americans in the use of English, and their instruction in those phases of civics, American history, sanitation and other related subjects which they can best assimilate, can be done only by specially qualified teachers. These must be prepared to select, organize and employ a wide range of teaching materials, and to use processes quite different from those which have become accepted in ordinary school and college instruction. But nearly all these teachers would be employed on a part-time basis, since most of the classes for foreigners will necessarily be evening classes. Perhaps public school teachers will continue to give evening school instruction, as is now frequently the case. But if so, these teachers, no less than persons following other occupations during the day, should have special training for evening school work with adults. It is probable that the Department of University Extension of the Board may become the most effective agency for the direction of the special training of these teachers.

(f) The education of adult foreigners should in time be associated with a systematic and formal entry upon the rights and privileges of American citizenship. The schools should therefore co-ordinate their training with existing naturalization requirements.

The development of a sound and effective program of education for adult foreigners is dependent on additional legislation, generous State support (to which might well be added support from the national government) and comprehensive State supervision. Proposals to meet these needs in this field, as well as detailed legislation, was submitted by the Commission on Immigration referred to above. The principles and many of the specific proposals of that program and proposed legislation were essentially sound.

EDUCATION OF DELINQUENTS.

At intervals in the history of education, during the last one hundred years, much attention has been paid to the special education of those who, because of their tendencies toward de-

linquency, become unfitted to continue in the public schools. This class includes habitual truants, misdemeanants and other delinquents for whom systematic correctional education must be provided.

Massachusetts, once a pioneer in the special education of these classes, has not in recent years given due attention to its newer phases and developments. There are now two distinct types of schools in the State to which are committed incorrigible minors, namely, the county training schools for habitual truants, and the State training schools for delinquent minors. Special disciplinary classes are found in the day schools of a few cities, but these have not yet reached a satisfactory stage of development. Massachusetts, during the course of the next few years, should and could place the training of all actual and prospective delinquents upon a much more satisfactory basis than at present. The means for devising programs to this end are even now well within our grasp. The following considerations are especially important:—

(a) In the public schools special measures should be taken for the systematic training of those pupils who begin to manifest evidences of delinquency. Examination of the homes of these pupils reveals conditions that in certain cases necessarily preclude the probability that such a home can furnish a satisfactory environment for the growth of its children into good citizenship. A widowed mother, obliged to work away from home, a family where one or both of the parents are habitual drunkards, — these are instances of cases where protection and care supplemental to that offered by the public school are indispensable to prevent growing delinquency. Many cases of incipient truancy are, however, found where the home, with some assistance, is capable of the right upbringing of the children. School visitors or other agencies should be provided to study these respective classes of homes, and to co-operate early and actively with that home in which it is to the best interests of the children to remain. The children of unsuitable homes will, of course, as now, become the wards of the State.

(b) Where, in spite of the best work of special or disciplinary classes in the regular public schools, habitual truancy develops and habits of an objectionable nature are being formed, a new

type of school, not yet existing in America, should be evolved, corresponding to certain day schools found in various English cities. This should be known as the day truant school, and should be frankly an institution of reform. Attendance on it should be for at least ten, and preferably twelve, hours per day, and the program should be organized so as to alternate study, physical work of a useful character and play. At least one and possibly more meals should be provided in the school itself. Pupils should not leave the school before 6 o'clock in the evening, and should then be required to proceed directly home. Loitering on the streets should not be permitted. Attendance officers should give special attention to all cases in this type of school. Pupils should remain in the day truant school until such time as their records establish a presumption that they can re-enter the regular school and maintain their standing, abstain from bad habits, and refrain from idling and defying authority on the streets.

(c) The boarding truant, or parental, school should be designed primarily for young people whose home environment is too bad to promote right habits. The boarding parental school is not intended for any other class of pupils. Furthermore, this school should retain its pupils long enough to bring about a substantial reform, and when the home is unable to furnish a suitable environment to which the pupil may return, he should be placed under conditions where continued good conduct is possible.

(d) The boarding parental school receiving pupils for a definite period, and presumably, in the large majority of cases, from homes providing an unsatisfactory environment, should not be regarded as a permanent feature of an educational system. Such a school should of course under no circumstances be regarded as a prison. Its administrative conditions, as far as possible, must approximate those of a good home. But if this be the case, and if the pupil gradually loses the feeling that he is in a prison or is being subjected to punishment, then, on his return to his own home, he is not strongly disposed to avoid recommitment. Hence the school does not serve as correction to bad conduct at home. In fact, under some circumstances, it may easily be imagined that he prefers to return

to the institution. On the other hand, of course, if the boarding parental school is conducted as a penal institution with the object of deterring its pupils from returning, its efficiency as an agency of reform is likely to be lost.

(e) In all institutions for delinquents, whether parental schools or State training schools, pedagogical programs are now inferior to what they should be, especially in respect to vocational training and the inculcation of ideals and habits of economic independence. In spite of oft-repeated claims to the contrary, very few boarding schools for delinquents as yet give any substantial or definite forms of vocational training. They do give much practical work, but commonly under conditions akin to those of gang labor, which are destructive of the independent initiative which should characterize those who are soon to become self-supporting economic units. Furthermore, except in a few institutions, such as the George Junior Republic, comparatively small provision has yet been made for the training of pupils in the wise spending of money.

Under present conditions the supervision of county training schools in Massachusetts is not satisfactory. Under existing laws a purely nominal oversight may be exercised by the State Board of Education and the State Board of Charity, but this oversight cannot be made effective by any means now at the disposal of these bodies. It is probable that county training schools should, like the State training schools, be under one general direction, and that they should co-operate closely with local day truant schools of the kind suggested above. They should, in fact, be boarding parental institutions, with indeterminate sentence and empowered to place their graduates in other than the home environment where such home environment is abnormal.

EDUCATION OF MENTAL AND PHYSICAL DEFECTIVES.

The education of mental and physical defectives is still in a condition of confusion in Massachusetts. A fundamental difficulty is the prevailing uncertainty as to the degree of State oversight or direction, if any, that shall be given to handicapped persons of mature years. The tradition and practice of the past has been to expect or require all except the hopelessly

feeble-minded to become self-directing and self-supporting at the age of sixteen or seventeen. Special schools for the blind, deaf, crippled and mentally subnormal have given their pupils, during the years from childhood to sixteen or seventeen, a general education, paralleling as far as practicable the courses in public elementary and high schools. Few, if any, of these schools in Massachusetts have seriously undertaken the vocational education of their pupils; that is, in the sense of deliberately and purposely fitting them for occupations which they are likely to follow as men and women. Some have offered generous courses of handwork, perhaps in the naïve belief that this would function in part as vocational education. In reality such handwork, while contributing an interesting element to the general education of these handicapped children, has had no important bearing on their future vocational efficiency.

The natural result has been that the great majority of the deaf, blind, crippled and partially feeble-minded on reaching maturity have encountered most disheartening if not hopeless conditions in the endeavor to become self-supporting. Under right direction a large majority of these persons are entirely capable of earning the cost of their support. But, as conditions now exist, they do not get that direction. They are commonly misfits in a competitive economic order, the result of the efforts of normal individuals to advance their own interests.

It is important that the State should ultimately assume charge of all those so handicapped that the struggle to find a place in the present system of competitive industry is unduly cruel and wasteful. It should do this no less to protect society from the inevitable parasitism of these semidependents than to spare them prolonged suffering from defects due to no fault of theirs.

In the meantime, whether the individual is to be left eventually to his own resources or is to be directed in his labor by State agencies, it is most important that systematic vocational education should be provided in every case through State schools. Massachusetts should have even now a large State school for the deaf, where these young men and women, usually not over sixteen years of age, leaving the private institu-

tions where they have received a general education, could obtain definite and effective training for the occupations which they can follow to advantage. Similar schools should be provided for the blind and the crippled.

The practice in Massachusetts of payment by the State for the tuition and support of deaf (and blind) children in privately controlled institutions, though expensive, is not open to criticism, at least until such time as the State shall have met other more pressing educational needs. But the State should encourage and aid the establishment of one or more day schools for the deaf in populous areas outside of Boston, and it should provide a custodial school for that limited number of deaf whose mental condition or bad habits render their presence undesirable in existing schools. The State should also render special assistance to local communities in establishing day classes for those whose hearing, sight or mental condition is such as to disqualify them for effective participation in the work of the regular public schools, but who are not so handicapped as to require institutional care.

NORMAL SCHOOLS.

Massachusetts surpasses other States in the number of her normal schools and in the variety of courses offered in them. During recent years the tendency has been to define more clearly their professional aims, and to work out in greater detail programs of instruction by which these aims are to be realized. The experiment of training the large majority of the students to become teachers in the first six grades only, in the regular two years' course, and a minority only for upper-grade work in a three years' course, especially organized for this purpose, has now assumed large proportions. Its results are being carefully studied. The normal schools are coming into closer touch with the public schools, with the result that training courses are being planned with increasingly conscious and intelligent reference to the needs of these schools, especially as found in rural areas.

The seventy-eighth annual report of the Board contains an extended discussion of the principles applicable in normal school instruction. These principles are now under examination by

the faculties of the schools. They will be reformulated in more extended and detailed form in the course of the next few years, and it is intended they are to find concrete expression in a standard course of instruction, which is to be the point of departure in determining the particular respects in which specific courses of instruction shall exhibit a local and individual character in any particular school.

Little, if any, additional legislation is required for the further development of the normal schools in Massachusetts. The State should provide the means for the maintenance of summer courses in at least some of these schools, partly for the sake of the regular students, many of whom would profit from such an arrangement, and, in larger measure, for the after-training of teachers already employed, an increasing proportion of whom may be expected to give in the future a substantial amount of time during the summer vacation to professional self-improvement. More adequate compensation and improved working conditions for teachers in normal schools will probably follow a convincing demonstration of the efficiency of these schools in fulfilling their professional purpose.

This demonstration depends on an increasingly definite study and formulation of the desirable aims of the curricula, and of the detailed means and methods of realizing these aims. The catalogues for 1915 contain detailed outlines of courses of instruction, many elements of which are still obviously traditional. Future announcements will show modifications based on experience in administering these curricula and courses, and, as indicated above, a standard or basal course will eventually be established as a norm whereby to test the validity and technical merits of particular departures made by individual schools.

In fact, a large number of problems of normal school organization and administration are now sufficiently defined as to be capable of fairly scientific examination. The following are examples: —

(a) What proportion of the time and energy of the student is it expedient to give to definitely cultural as distinguished from professional studies?

(b) To what extent, and by what means, can those voluntary activities of normal school students which most contribute to their personal and professional development be increased?

(c) What arrangement of practice school facilities best combines economy and efficiency, as regards space allotments, class organization, teaching periods of individual novices, supervision of such teaching, and its correlation with the normal school courses?

(d) What should be the purpose, scope and character of the general professional studies, such as history of education, educational psychology, school law?

(e) To what extent should the training of teachers for intermediate schools (upper grades) fit them chiefly for departmental teaching?

(f) To what extent and by what means can normal school faculty members actively participate in an advisory capacity in the supervision and administration of the neighboring public schools, both with a view to rendering a service to these schools and also to obtaining valuable reactions on the normal school work itself?

These are but a few of the problems of normal school education now possible of consideration and investigation by fairly definite methods of analysis and testing.

THE TRAINING OF TEACHERS FOR SECONDARY SCHOOLS.

The question of the professional preparation of teachers for secondary schools by public agencies has never received serious consideration in Massachusetts. Existing colleges have furnished public school authorities with a number of graduates more than sufficient to fill vacancies annually occurring in teaching positions. These graduates usually possess a fair equipment in knowledge of the subjects to be taught. A few have natural gifts for teaching. But in most cases they begin work with no knowledge of the art of teaching, and have painfully to acquire that art — if at all — through wasteful experimentation with their pupils.

In days when low standards of service were perforce accepted, in public as well as private employment, little conscious objection was made to the practice of filling vacancies in high school positions with novices who were of necessity unsupervised apprentices and often bunglers. Now the situation is different. We know that secondary school teachers no less than primary school teachers can be trained for their work. We

know that such training can be given in a comparatively brief time, — a year devoted specifically to this end may prove ample, — and we know that years of inefficiency and consequent loss to the teacher can thereby be saved, and the disheartening and intellectual maiming of scores of pupils be obviated.

The aims of such training can now be clearly defined. The questions yet to be solved are chiefly those of ways and means. The first positive proposal, naturally, to be made is that one of the existing normal schools should be given this as its special task. This course has, in fact, already been followed in two special fields of high school work, for which existing colleges did not offer graduates equipped with a knowledge of the subject-matter, namely, household arts and commercial subjects. New York State years ago set apart one of its normal schools for the exclusive service of training high school teachers. The Massachusetts Normal School at Bridgewater formerly offered a four years' course, which gave at least part of the training required for high school teaching. Quite naturally, then, many persons interested in a more effective training of teachers for the public high schools — which, in Massachusetts, with their 70,000 pupils, require from 250 to 300 new teachers each year — think first of the solution by a State normal school. More than once Governors in their messages have adverted to this possibility.

A more extended examination of the subject, however, shows unsuspected complications. It is clear, first of all, that the properly equipped secondary school teacher must be a graduate either of a State university or an endowed college. The experience, breadth of view and general training, as well as special scholarship acquired under college conditions, are essential. Hence, a State training school must either require a college degree as one of its entrance conditions, or else it must substantially duplicate the departments and courses of a college of arts and sciences. The New York Training College attempts to do this, but at great expense and with results that cannot be deemed wholly satisfactory, because even in that State, employing school authorities prefer college graduates for the more important high school positions.

It is very doubtful if Massachusetts could or should maintain

a four years' training school for this purpose. But, in view of the large number of graduates coming each year from the score of colleges in Massachusetts, it should be feasible at no extraordinary expense to provide a State training school for secondary school teachers, open only to college graduates, and with a one year's course combining practice teaching with a large amount of definite training towards some one department of high school teaching. The cost of maintenance of a school of this character need not exceed \$50,000 per year.

The State should not, however, embark on such an enterprise until it is reasonably well assured that existing colleges cannot provide the required training. Some of these colleges recognized years ago that their graduates, notwithstanding their lack of special qualifications for teaching, were, nevertheless, finding positions in large numbers in secondary schools. They therefore provided departments designed to give prospective teachers among their students at least some theoretical instruction in the history, problems and methods of education. These departments of education, at first weak and not in very high repute even in their own institutions, have grown steadily in importance and influence. In a few instances they have developed promising programs of practice teaching. They have reacted, too, on the academic departments in some cases by inducing the latter to offer the teaching of methods in their special fields.

But these departments have always labored under the great handicap that the training must be given to the student while still an undergraduate. The typical college undergraduate, intent on earning a degree, does not give serious consideration to his prospective calling. The college is not for him a professional school. Courses in education may be taken, but too often only in the same spirit in which he takes other abstract courses, — as part of the enterprise of earning a degree. Practice teaching by undergraduates is not, ordinarily, counted toward a degree, — a most illogical position, as it is part of the preparation for a profession, which the college obviously approves as a career for many of its graduates. In general, then, and for a variety of reasons, all attempts to utilize the undergraduate period of the student's work simultaneously for the

purpose of earning an arts (nonprofessional) degree, and to give definite professional preparation for a teaching career, have been only partially effective, and must prove constantly less acceptable in proportion as standards of professional competency in high school teaching become more exacting.

The obvious solution, and one already fully accepted by California, and tentatively by several other States, is to relegate to a graduate year the final and, especially, the definitely practical preparation of secondary school teachers. During the undergraduate years it would be entirely feasible to give a large part of the academic preparation required for any secondary school teaching field, as well as instruction in the more theoretical subjects of the study of education itself. The graduate year could then be reserved for practice teaching, an intensive study from the standpoint of the teacher's work of the subjects he is to teach, and an examination of the actual problems of secondary education. This graduate year would thus be truly a year of professional preparation for this field of teaching.

The question at once arises, why have not colleges done this of their own motion? A few have indeed done it in a partial degree, but in general it has not been done for two reasons. The colleges themselves have been slow to recognize their responsibility as agencies for the training of secondary school teachers, though they have been always ready to oppose the suggestion that other institutions might do this work. A more important reason, however, is found in the fact that in the absence of any certificate requirement for secondary school teachers no one college could offer any substantial inducement to its students to remain for a graduate year of specific professional preparation. Employing authorities would too seldom give preference to the more fully trained candidate at even a slightly higher salary.

Therefore it is certain that there can be no material raising of standards for secondary school teachers until a system of certification requiring minimum professional standards shall be in force. With such a system in operation it is probable that several institutions, such as Harvard, Boston University, Tufts College, Clark College, Holy Cross College, Smith College and

others, would immediately proceed to develop adequate facilities for the professional training of graduate students (if that standard were established as a certificate requirement) towards designated departments of teaching.

A sound administrative policy on the part of the State, based upon the principle that the State shall not undertake work which private agencies are able to do acceptably, requires in the first place the enactment of legislation establishing methods of certificating high school teachers, and requiring the holding of specified certificates for each type of secondary school position. The administering authority should then study the facilities of the colleges, the needs of the high schools of Massachusetts, and the possibilities of a gradual advance in the requirements for certification. It is safe to predict that the colleges would actively co-operate in raising standards. Some future date should be designated after which the equivalent of a year of graduate professional preparation would be required for certification as a high school teacher.

If, in the course of a few years, it should become evident that the existing colleges are not equal to the task of maintaining effective departments for training high school teachers on the basis here set forth, then certainly the State would be justified and under obligation to undertake this work. But that step should be taken only after the existing institutions have failed to show that they can render such service.

The enactment of the legislation on certification, as recommended by the Board, is a necessary first step. Then should follow the creation of an agency, preferably a bureau in the Board of Education, charged with the certification of teachers and to co-operate with the colleges in raising standards.

It has been contended by some authorities, and especially by Mr. Kingsley, agent of the Board of Education for the promotion of secondary education, that a policy of combining the preparatory training of high school teachers with supplemental training after they have entered upon their work is one which the State should deliberately adopt. There are in Massachusetts approximately 270 high schools, having in all about 70,000 students. As was pointed out elsewhere, there is every reason to expect profound developments and modifications in

the work of these schools during the next twenty years. It has long been notorious that the influence of the endowed colleges on the public high schools, exerted in part through admission requirements, in part through the training of their teachers, and in lesser degree through the dominant influence of the college men in the writing of text-books and in the councils of teachers of special subjects, has been conservative if not reactionary. The most helpful influences in the development of better aims and methods for secondary education have come from the departments of education of these colleges, and often the least helpful from academic departments and committees on admission.

A still more fundamental consideration is found in the modern development of so-called part-time vocational preparation, the principles of which, applied in the situation under discussion, would require that a part, and an important part, of the teacher's final equipment for his work should be obtained after he begins to teach, under the supervision of some one who is a master in his field. Mr. Kingsley's contention is that the State should have a staff of at least four or five specialists in the various departments of high school instruction who could divide their time between the work of training novices (students in a one year's graduate course) for teaching and that of supervising in a definite way as State supervisory agents the early teaching efforts of those high school teachers who had already begun work. Thus any fundamental changes desired by the State in the aims, means and methods of secondary education could be made with a fair degree of expedition.

The point of view of Mr. Kingsley is fundamentally important. That systematic after-training of high school teachers will be required in any really efficient system of secondary education cannot be doubted. The question whether this can most efficiently be accomplished by the agencies which direct their preliminary training, or through the administrative agencies, local and State, which direct and supervise their work after entrance on their profession, is one for careful study. In the meantime a number of steps can be taken, among which is the establishment of a certificate requirement which commits the State irrevocably to no one policy alone.

THE TRAINING OF TEACHERS FOR VOCATIONAL SCHOOLS.

The training of teachers for State-aided vocational schools has been systematically undertaken by the Board of Education. No separate institutions have been created for this purpose, it having been found expedient to use existing schools and shops for preliminary and part-time training. In the case of teachers for commercial schools, courses are now given in the State normal school at Salem, and the more comprehensive development of these is already under way.

In the course of the next ten years the training of vocational school teachers must become an important part of the educational system of the Commonwealth. This training will be differentiated according to the occupation for which fitness is being sought, but the following general principles will probably control: —

(a) Teachers for schools of farming (or agriculture) will, in the main, be graduates of agricultural colleges who have, either before or subsequent to such graduation, had a few years' successful experience as farmers.

(b) Teachers for commercial schools will be graduates of a commercial training school, and in addition thereto shall have served two or more years in a wage-earning capacity in commercial callings.

(c) Teachers in trade or industrial schools will be, first of all, skilled artisans in the trade for which they expect to give training, and in addition thereto will have obtained, by short courses or evening instruction, training in pedagogical methods. Furthermore, it may be expected, in time, that many of these teachers will come from the ranks of those who have graduated from day industrial schools.

(d) For the training of industrial teachers a system of State scholarships may have to be provided, by the aid of which these teachers shall be enabled to serve in the capacity of apprentice or assistant teachers for a period of one year or more in existing vocational schools.

CERTIFICATION OF TEACHERS.

The matter of the certification of teachers has been before the Board of Education and the Legislature now for several years, and the program proposed by the Board in the interests of an effective upbuilding of a professional teaching force in Massachusetts is presented in detail elsewhere in this report. It should constantly be emphasized that a State-wide system of the certification of teachers is essential to the development of standards in a number of directions, not only as regards preliminary training, but also as regards the professional standing of teachers in the community, compensation, systematic after-training, and the shifting of teachers from one community to another.

THE AFTER-TRAINING OF TEACHERS.

In proportion as increasing demands for greater efficiency are made upon teachers it becomes more evident that training prior to their beginning service at best constitutes only a part of the entire professional preparation they should ultimately receive. Definite attempts must be made to provide more effective additional training for teachers in active service. For many years teachers' institutes, associations and conferences have been the only means of such after-training, and while they have rendered substantial service, they are now proving inadequate to meet the modern needs. Radical developments are necessary before a satisfactory character and degree of after-training can be secured. The basis for such developments will probably be obtained through legislation and administrative measures, designed to accomplish definite objects as to length of the period of employment of the teachers, adequate compensation and requirements for prolonged professional training. It is here suggested that —

1. All teachers be under service throughout the year and be paid in 52 weekly or 12 monthly installments.

2. A definite program for the employment of the teacher's time for each year should be approved by the school authorities, which program should include time of actual teaching, time for professional self-improvement and a definite vacation period.

3. For example, a program for a young teacher might be as follows: thirty-six weeks' actual teaching in school; two weeks' incidental vacations throughout the year; four weeks of a definite summer vacation; and six weeks' attendance on a summer school. Under other circumstances, and for more mature teachers, attendance on summer school might be replaced by special teaching in vacation schools or in summer camps or by travel, or by any one of several other possible means of professional self-improvement.

This tentative program does not cover the fifty-two weeks of the year. It is generally agreed by educational administrators that if teachers would report at least a week prior to the opening of the schools, and remain a week after the close, the benefits would be marked, and especially so in the case of country schools and of teachers beginning service. It should at once be apparent that a week spent before the opening of the school year, and another after the close of the year, for interviews with individual pupils, adjusting records, and arranging for the satisfactory inaugurating or closing the work of the year, would result in enhanced efficiency of the school during the period in which classes are regularly in session.

These proposals are submitted in the conviction that the professional after-training of teachers must, much more than heretofore, become a systematic and effective affair in educational administration. Salaries of teachers must be increased because of added expenses and responsibilities, but, soundly administered, the above program would certainly lead to a substantial gain in teaching efficiency. Teaching would become more professional in character, and the school authorities, in approving the year's programs of the teachers, would gain a keener appreciation of the desirability of rewarding them for special efforts to improve their professional equipment.

COMPULSORY SCHOOL ATTENDANCE.

State supervision of the administration of attendance laws is clearly essential to their proper enforcement. The Board of Education has already submitted bills for proposed legislation providing for the systematic registration of minors required by law to attend school, whereby the local administration of com-

pulsory attendance laws would be greatly expedited. A uniform enforcement of the law, as well as a uniform execution of the provision regarding registration, requires that a State agent should be employed by the Board to co-operate with local school authorities in establishing standards and supervising administrative details. The same State official might well undertake prosecutions for towns and smaller cities in the few instances where prosecutions will be necessary. Experience shows that local authorities are often greatly embarrassed in the conduct of prosecutions, and that the services of a State official in such cases would operate greatly to reduce the number of cases requiring prosecutions.

MEDICAL INSPECTION OF SCHOOLS.

Massachusetts took an advanced position in 1906, when, through comprehensive legislation, medical inspection of schools was made compulsory in all towns and cities. This law gave school committees (where these functions had already been exercised by local boards of health) broad powers and important responsibilities. During the ten years since the passage of this act almost all the towns and cities of the State have provided for some form of medical inspection. In 1915 upward of \$100,000 was spent on this service by cities and towns other than Boston (in which there is an exceptionally well-organized system). The law has been in operation a sufficient length of time to show that while, as now administered, it leads to some good results in all communities, and much good in some progressive communities, it is seriously defective in the following respects: —

1. It permits more than one school physician to be appointed in any town or city. As a result small communities are frequently being served by several school physicians. The compensation of each is necessarily small, and hence there is little inducement for any of them carefully to study the more fundamental questions bearing on the preservation and promotion of the health of school children. In some cases, too, responsibility is seriously divided.

2. School physicians are eligible to serve on school committees, and not infrequently the school physician is an em-

ployee of the board of which he is a member, — a condition inconsistent with sound administrative policy.

3. In about half the cities of the State (but only in one town) school physicians are appointed by, and responsible to, the local boards of health. This arrangement, while not objectionable in so far as medical inspection is concerned with the prevention and control of communicable disease, is not satisfactory where the more technical and modern phases of the promotion of the health of school children are concerned. Medical inspection at its best devotes much effort to investigations of the less obvious aspects of school hygiene and sanitation; examines closely into chronic defects of eyes, ears, teeth, throat, glands, spinal column, nerves and digestive organs; scrutinizes the daily regimen of work, play and rest required and permitted by the school program; and brings school and home into close co-operation in caring for the physical welfare of pupils. Medical inspection of this character is rarely developed effectively under other auspices than those of the regular school authorities, who can prevent conflicts of jurisdiction and who are in position to promote a close co-ordination of school work and health inspection.

4. No provisions exist whereby the experience of one community in medical inspection can be made systematically available for another. There is no assurance that the school physician will bring special knowledge to what is essentially a task calling for special knowledge. Measures have not been taken to apply uniform standards where administration in accordance with such standards would be practicable.

5. The school nurse is a necessary agency in effective health supervision in schools, but the law as regards the appointment of a nurse is only permissive.

Medical inspection of schools is of such modern development that the exact development of its probable future is not as yet clear. Nevertheless, its principal features and obligations are clearly defined. The assembling of children from six to fifteen or eighteen years of age in schools, under relatively artificial conditions, makes necessary special and definite provisions for safeguarding their health and promoting their physical development.

These ends are to be accomplished best by combining local medical service with State supervision. Because the latter is yet undeveloped in Massachusetts the former is in too many instances badly organized and ineffective.

The definite immediate field of constructive effort lies in legislative authorization of means, whereby the State Department of Health and the Board of Education can provide and direct a definite amount of expert supervision in this special field. Other needed developments may be expected to flow logically and in due course from this important beginning.

SUPERVISION OF PLANS FOR SCHOOL BUILDINGS.

Technical knowledge as to the location, construction and equipment of school buildings has now reached a state where central expert agencies must be utilized to make such knowledge available for school authorities in general. Heretofore the lighting, ventilation, fire protection and sanitation have been under partial State supervision. Even such oversight in Massachusetts has, however, been hampered in many ways by existing conditions, and a complete reorganization of the existing practice is essential. Much technical knowledge as to structural materials, playgrounds, internal arrangement and equipment of rooms and seating is now available, upon which may readily be based standards measurably scientific in character.

In the near future legislation and administrative facilities should be provided for the realization of the following ends: —

(a) All plans for school buildings, before adoption by the local authority, should be subject to the approval of a central State authority, competent to pass upon a wide variety of technical matters, such as location, structural materials, lighting, ventilation, heating, protection from fire, size and arrangement of rooms and other spaces, equipment and sanitary arrangements.

(b) This central authority should have power to examine existing school buildings, and to submit to the local authorities, in detail, plans for so remodeling them as to bring them into conformity with reasonable standards of health, safety and utility. The State authority should be empowered to require

needed alterations, and under some circumstances to meet, in part at any rate, the expense of such alterations.

(c) A State authority should be empowered and equipped to provide, when requested, plans of school and other buildings for educational purposes. It may be expected that in course of time such plans will be largely standardized. Furthermore, the State authority should be enabled to do research work on the safety, durability and usefulness of structures for educational purposes.

V. Fundamental Requirements.

The foregoing brief review of the needs of various departments of education as regards their further development in Massachusetts, and of the possibilities of meeting these needs in part through more effective use of administrative agencies, clearly discloses certain administrative needs of a general character. These are: (1) that the aims, means and methods of all forms of education shall be more scientifically determined and evaluated; (2) that professional supervision of a responsible and definite character shall be made more generally possible for local and central (or State) educational authorities; and (3) that provision for meeting the cost of all forms of public education shall be of such a character as to insure at all times adequate support, proper supervision of expenditure, and an equitable distribution of the burden of the necessary taxation.

SCIENTIFIC METHODS IN EDUCATIONAL ADMINISTRATION.

There is a real need that educational administration shall be made more scientific. The character of this need, when expressed in general terms, is not always clear; but when considered in relation to specific phases of educational administration some possibilities, as well as limitations, in meeting it stand out in relief. For example:—

(a) In the erection of school buildings principles of engineering science can now readily be applied in such matters as structural arrangements, building materials, lighting, etc. But it is difficult to obtain a scientific handling of problems of the right size of school buildings, size of schoolrooms, arrangement of laboratories, interchangeable use of desks in high schools,

need of assembly halls, and the like, because standards as to the underlying educational requirements are still in dispute.

(b) When funds are appropriated on a budget basis for designated educational purposes, it is practicable to apply thoroughgoing methods of accounting in recording and reporting expenditures. But it is difficult to arrive at satisfactory conclusions as to principles upon which educational expenditures should be based, because the more fundamental needs and possibilities of the education to be provided cannot be measured accurately or even precisely estimated. Such estimates must often be based upon subjective rather than objective standards. Hence the amounts of appropriations for specific purposes are often based on beliefs or opinions instead of on knowledge of concrete facts, conditions and actual needs.

(c) The actual results to be achieved through definite forms of schooling are in only very few cases as yet capable of definite description. We can agree in some measure upon the scope and character of the results to be achieved in teaching children of specified ages spelling, penmanship, computation in arithmetic and reading. But in other lines — kindergarten teaching, art instruction, history study, physical training, and the like — the objective results are capable at best of only most imperfect description and standardization. Hence, while in the subjects first named the results of different methods of organization and teaching are capable in some degree of being tested and compared, in the case of the second group of subjects named no such definite testing and comparison of results are as yet practicable. Even if objectives were clearly defined in these fields, we nevertheless still lack standards of measurement. Hence subjective standards, reflecting beliefs and opinions, are the chief present means of evaluation and comparison.

(d) Still less is it practicable at present to apply scientific standards in attempts to determine the value to the individual and to society of the general results of education, as manifested in the adult, in qualities of character, as idealism, adaptability, courage, industry and the like. These qualities, varied as to kind and degree, we find in all adults; but how far in any given case they are due to specific kinds or conditions of

education we have no adequate means of determining. Experience proves that particular institutions or courses of instruction which often seem to produce these qualities in desirable form in fact operate chiefly as selective agencies, attracting those who already possess potential possibilities for the development of these qualities.

That education should be less advanced than medicine, agriculture, building, metal production, transportation and war in the application of scientific principles and methods is not surprising when the complexity of the sciences underlying education is understood. Discoveries in the physical sciences laid the foundations for the present organization of transportation, communication, war, and, in large measure, manufacture. The development of the biological sciences made possible modern medicine and agriculture. A system of education based on scientific foundations, while making some use of the data and principles of the sciences already mentioned, must in far greater degree be based upon the sciences of psychology and sociology, neither of which is yet well developed. Each, in its present stage of evolution, may be compared with chemistry in the eighteenth century and biology in the first half of the nineteenth century. A system of education based upon scientific principles must, certainly, derive its aims in part from scientific knowledge of society and in part from scientific knowledge of the child as a subject of education. Scientific methods of teaching — including thereunder the means of teaching, such as books, laboratories, lectures and the like — must also be based largely upon knowledge of the psychology of the child as learner. Hence, while by methods more or less empirical in character, education is steadily making progress, a comprehensive and exact analysis of its problems, as well as the application of sound methods to the improvement of educational administration and to teaching processes, must obviously be greatly helped by the further development of its two most basal sciences, — sociology and psychology.

In the meantime it is of fundamental importance that all educators and all persons interested in education should insist on two things: (*a*) the application of scientific methods generally to the study of all those phases and factors in education to

which such methods are even now applicable; and (b) the establishment of a persistent and well-supported demand for the further development of the sciences from which contributions to a scientific system of education are to be expected. If we study the history of any one of the great fields of human activity in which scientific control of processes has succeeded to the former custom control — *e.g.*, medicine, agriculture, metal working, building — we find, on the one hand, that the later stages of the era of custom control were characterized by extended efforts to apply scientific methods, and, on the other, that general, irresistible demands arose for the development of the underlying sciences. So extensive has been the former influence in some directions, notably in medicine, agriculture and industrial chemistry, that the actual contributions of new and fundamental knowledge made by the workers in fields of applied science have frequently surpassed in value those made by persons engaged exclusively in research in the so-called pure sciences. There are signs everywhere that a similar condition is now developing in education. "Child study" opened lines of inquiry which resulted in some valuable conclusions which would have been reached more slowly by research in pure psychology. The systematic study of children's learning powers and processes, as exhibited in the acquisition of right habits of reading, writing and spelling, is even now producing substantial results in more effective methods of teaching. Sound methods have recently been applied with success to the study of the mental processes involved in the learning of a foreign language and also to study of the so-called "transfer of training." These studies have also exercised a definite influence on the work of psychologists.

Therefore the demand for a system of education founded on a more scientific basis, now gaining strength among more progressive educators, is entirely reasonable and right. That this demand is also being made by interested and intelligent laymen almost as much as by educators is shown by public (or popular) interest in educational surveys, inquiries and research.

Of the various divisions of educational activity discussed in the previous section of this report there is no one in the further study of which it is not now possible to apply in some degree the methods of scientific analysis and also, in all work of re-

organization and improvement to some extent, to apply scientific principles already well established. Especially can this be done as regards the study of: (1) the social needs met by any department of education; (2) the determination of specific aims of instruction in the lower grades, and the evaluation of results of particular methods of teaching therein; (3) the desirable aims, means and methods of intermediate school education; (4) the aims that should control in secondary education; (5) definite experimentation to discover best methods of training towards vocational competency; (6) the possible and desirable scope of continuation education; (7) the actual results of the kindergarten; (8) possibilities of part-time higher technical education; (9) the actual fields of applied art education; (10) the possible fields of extension teaching, and the best methods of getting valuable results in correspondence instruction; (11) the most effective methods of teaching English and civics to adult immigrants, and the most effective and equitable methods of meeting the cost of that instruction; (12) the scope and character of the training best suited to delinquents; (13) the best methods of fitting defectives for vocational competency with or without custodial care; (14) the improvement of standards of normal school instruction; (15) means of developing systematic training of secondary school teachers; (16) the correlation of practical efficiency already acquired in productive callings with training in teaching methods in the preparation of vocational school teachers; (17) certification of teachers as a means of raising the professional qualifications of all those admitted to the profession; (18) the general use of a portion of the teachers' available time and energy for purposes of further professional improvement; (19) effective means of so enforcing attendance legislation as substantially to eliminate voluntary non-attendance, as has been done in continental European countries; (20) the foundations of sound administration of medical inspection in schools, and definition of the desirable limits to publicly supported preventive and curative activities in connection therewith; and finally (21) administrative means whereby the employment of expert knowledge and right standards may be enforced in the planning and erection of school buildings.

PRINCIPLES OF ADMINISTRATIVE ORGANIZATION.

What forms of administrative organization are most favorable to the realization of the more comprehensive and more scientific educational administration now needed? This is a question of vital interest to all citizens of Massachusetts, because many of the forms of strictly local administration at once characteristic of, and necessary to, the evolution of a public school system, in its primitive stages, survive here to a degree greater than in many other States. With the exception of smaller rural communities the towns and cities of Massachusetts have exclusive control and supervision of their own schools, and full responsibility for their support. The State has no authority or control over the exercise by the local authorities of such functions as certification of teachers, selection of text-books, accounting, standards of school work required or supervision of private schools. Very inadequate and partial State supervision is exercised over the construction of school buildings, the control of communicable diseases and the collection of educational statistics. Only industrial and other forms of so-called State-aided education are subject to adequate State supervision. It is frequently contended, indeed, that State supervision should prevail only where State funds are applied, — surely a short-sighted policy, in view of the fact that the Commonwealth as a whole, by numerous and detailed laws, establishes and requires the maintenance of the public school system, and in the long run the strength or weakness of the Commonwealth must depend in part on the effectiveness of public school education.

Nevertheless, there is as yet no general agreement as to what would constitute the best disposition and organization of administrative agencies for education. It would be wholly inexpedient that all the public schools of Massachusetts should be placed under the immediate control of a State authority, as is frequently urged in legislative debates. On the other hand, the extreme localism of administration and support characteristic of the State is conducive to waste and inefficiency in the educational systems of many communities, and to such an extent that while there are in some municipalities (usually those

in which the population includes a large proportion of individuals having wealth, culture and civic interest) as good schools as can be found in the country, in others, school conditions are as poor as can be found anywhere in the northern States of the Union.

The time appears to be ripe for the development of a comprehensive system of administration under which existing defects of supervision may be remedied without destroying popular direction of, and interest in education. That such a system can easily be developed is abundantly demonstrated by the experience of other States, which, at least in particular respects, have achieved the following results:—

(a) The development, in connection with the exercise of each important educational function, of expert service, with the necessary conditions of ample previous professional training, adequate compensation, secure tenure, freedom from undue restrictions, and direct responsibility to competent superior expert or lay authority.

(b) The conservation of local and popular interest in, and sense of responsibility for, all that pertains to successful school administration and teaching.

(c) The organization of administrative units (in terms of geographical area or extent of population) as large as is practicably consistent with securing in proper form the conditions described under (a) and (b).

To produce these results requires, as the history of political administration abundantly proves, the progressive application of the principle that where an important and distinctive administrative function is to be exercised, two agencies (sometimes an expert and a lay, sometimes a local and a central) shall each be assigned definite responsibilities which, however, must not involve duplication of responsibility or uncertainty as to where final responsibility lies. One agency is to initiate, recommend, administer, the other to approve. The following are illustrations:—

(a) Teachers are selected and nominated by an expert local authority, and the nomination approved by a lay local authority. (Now the prevailing practice in Massachusetts.)

(b) The central authority certifies teachers, and the local

authority makes selection from those certificated. (Now the practice in most States other than Massachusetts.)

(c) The local authority formulates courses of study which, before becoming effective, must have the approval of the central authority. (This is the practice now as regards the vocational schools of Massachusetts. It is the general plan followed in all forms of education in European countries.)

(d) The local authority adopts text-books, subject to the approval of the central authority as to kind selected, term of use and price; or the central authority may prescribe books for general use, and may allow a particular locality, for sufficient reasons, to make departure therefrom.

(e) The local authority may be required to levy a minimum local tax, and may be required not to exceed a stipulated maximum except with the permission of the central authority.

(f) The central authority may define conditions for school buildings, subject to which the local authority may take the initiative in providing for plans and construction; or, plans locally prepared, may be required to have approval of a central authority before contracts for construction are let.

These are only a few of the illustrations of the many practices now employed to insure administrative efficiency. They exhibit a gradual evolution of certain sound principles of school administration which should be applied consistently in Massachusetts. Possible applications of these principles, in addition to those now effective or under consideration, are —

(a) The certification of teachers (and superintendents of schools) by State authority.

(b) The legal requirement that plans for school buildings shall be approved by State authority as to all factors essential to safety and educational usefulness.

(c) The requirement by law that all private educational institutions, or State educational institutions which receive State money, shall submit their estimates to the Legislature through the State educational authority, which shall formally comment on the estimates in the light of knowledge obtained through adequate study of the particular form of education concerned, in its relation to the educational needs and possibilities of the State as a whole.

(d) Provision that State aid may be granted for special forms of education or to meet financial needs of municipalities, subject to approval of State authority for the work done with such money.

(e) Provision for school surveys, at the request of local authorities, under the auspices of State authority, the findings of which may, through systematic publicity, be made effective in producing better conditions.

(f) Co-operation of State agents with local authorities in raising standards of medical inspection of schools, and in enforcing attendance laws, the influence of the State authority to be exercised in part through systematic publicity.

The above may be regarded as desirable stages in the development of a system of educational administration at once comprehensive and effective, which system contemplates the evolution of sufficient special service adequately to provide standards and to direct in the exercise of each important educational function. It seeks to preserve in largest measure local interest and initiative in all matters which the local authorities can handle to best advantage, presupposing the co-operation, advisory and in some instances supervisory, of specialists in the service of the State.

The organization of the State authority best calculated to perform these functions need differ but little, if at all, from that now found in Massachusetts, namely, a lay board of unpaid members appointed by the Governor, whose functions shall be in the main deliberative and legislative in deciding on general policies, the execution of these policies being left to employed specialists.

FINANCIAL AID FROM STATE.

The existing situation in Massachusetts as regards the support of public schools is most unsatisfactory. The Board has already submitted two special reports to the General Court dealing with this subject. In brief the findings of the Board were:—

(a) The present system of school support in Massachusetts is excessively burdensome to poorer communities, that is, communities having a relatively large public school attendance in proportion to taxable valuation.

(b) There is no guarantee that poorer communities can or will reach the minimum educational standards which the State has a right to expect shall be reached in all cities and towns.

(c) Massachusetts imposes upon local communities, irrespective of their taxable valuation, a larger responsibility for the support of public schools than does any other State in the Union.

(d) The State aid now given to smaller towns (usually those having a valuation of less than \$2,500,000) is not so distributed as to give proper aid to the poorer, or to insure proper supervision of the education so aided.

(e) State aid, sufficient to equalize in reasonable degree the educational burdens of municipalities in providing the scope and quality of instruction contemplated by existing legislation, would require an amount of money substantially equal to one fifth of the sum now annually expended for the maintenance of public education in the Commonwealth. If this were available expenditures from local taxation would be somewhat diminished in poorer municipalities, but probably not in equal amounts.

(f) State aid when provided should be distributed in at least two, and preferably three, forms.

(1) The largest portion — not less than 80 nor more than 90 per cent. — as an *equalization fund*, conditioned on stated reasonable contributions from the community, and designed so to supplement such contributions as to insure equal minimum standards of public instruction throughout the Commonwealth.

(2) A remaining portion of the State aid should be placed in the hands of a State authority, for use in meeting special educational emergencies or in providing aid to promote the introduction or support of unusual or special forms of education. Many States thus assist such work as English for foreigners, agriculture, rural supervision, etc.

(3) A third portion should be reserved to be expended, under the direction of a State educational authority, in promoting educational experimentation, research, surveys, etc.

If the development of an acceptable State system of public education, designed to assure minimum educational opportunities to the residents of all municipalities without excessive

local cost, is to be realized, then a comprehensive scheme of State aid must be evolved. To this end it will doubtless be necessary to effect extensive readjustments in the system of taxation now existing, after which the enactment of fundamental educational legislation should be undertaken.

B. REVIEW OF REPORT OF THE COMMISSION ON ECONOMY AND EFFICIENCY RELATIVE TO MASSACHUSETTS NORMAL SCHOOLS.

On Dec. 31, 1914, the Commission on Economy and Efficiency transmitted to the Governor, Council and General Court an extended report on the State normal schools, comprising 125 pages of printed text, of which about 45 pages were devoted to an historical review and the remainder to reports on individual normal schools, a brief final survey and general recommendations.

The commission makes a number of valuable criticisms and suggestions. In certain essential respects the report exhibits a lack of acquaintance with changes already initiated at the time the report was in preparation. Many of the policies and practices criticized had already been studied by the commissioner and discussed by the Board, with the result that changes were in due process of being made. Some criticisms were made under misapprehensions of conditions which have always existed in the schools themselves. The commission's findings and criticisms can best be studied under the general heads given below.

I. Defects of Existing Publications and Records.

Relative to existing sources of information regarding the normal schools the commission says: —

Information relative to the normal schools as set forth in the catalogues of the schools and in the annual report of the Board of Education is defective and capable of change and improvement. In such catalogues, and among other things, carefully prepared summarized information should be furnished the reader relative to the nature and extent of the courses offered and the time apportioned to each. The present indefinite and vague information suggested in some of the normal school catalogues is productive of naught but confusion to the prospective student. By

careful arrangement such catalogue could briefly and yet quite fully set forth all information necessary to one contemplating a course in the school. (Page 285.)

These criticisms are in the main just, in view of modern requirements as to useful publicity. Elsewhere in its report the commission criticizes the absence of definite information as to the activities of the normal schools in former years. Definite improvements are now being made in the records and publications of these schools. The commissioner arranged two years ago that the catalogues for 1915 should present, in a uniform way, information as to curricula and subjects of instruction offered. These catalogues are now available; they all contain specific and definite announcements as to the character and scope of courses offered, names of teachers offering them and number of recitations weekly.

The commission points out that prior to 1911 the annual report of the Board of Education included a special report for each normal school, signed by the visitors of the Board for that school. This report contained interesting and useful historical and statistical data. In 1911 these special reports were discontinued. The statistical information regarding the schools was combined in one table, while miscellaneous items of interest regarding the schools were presented in the commissioner's report.

It is desirable that each normal school principal should submit annually a full report to the Board, detailing the progress of the school and reviewing important facts in the current year's work. In 1914 the commissioner requested the principals to prepare, for submission to the Board by Oct. 1, 1915, a typewritten report of this character. These typewritten reports are to be bound into a volume, and circulated among the members of the Board. Features of these reports of greatest public interest are reviewed in Part II. of this report. Each principal is directed to file in the archives of the school a copy of his report, thus preserving in the school itself useful information for inquirers in the future. The facts regarding the appropriations and expenditures for each school are exhibited in the annual report of the State Auditor.

II. The Cost of Training Teachers.

By implication in several places in its report, and by direct statement on page 276, the commission seems to criticize the management of the State normal schools as having become unduly expensive in recent years.

Since the establishment of the four additional normal schools in 1894 the cost of maintenance of the system has advanced from that of economic expenditure to lavish display, and yet in the face of this enormous increase the work of the schools continues, rather than progresses, regardless of legitimate needs.

This statement is made in the midst of a general discussion of the so-called non-functioning studies and of additional courses that duplicate each other in the various schools. If the commissioner interprets the foregoing statement correctly, it presents an exaggerated and incorrect view of the actual situation. The purpose of the establishment of the four additional normal schools in 1894 was to increase the supply of trained teachers available for public school service. The expenditures on behalf of normal schools have, naturally and unavoidably, very materially increased as a result. As shown in the table below, the total expenditure for all the State normal schools in 1914 was about 265 per cent. more than the total expenditure for 1894, and about 56 per cent. more than in 1904. On the other hand, the total number of graduates in 1914 exceeded by 232 per cent. the number graduated in 1894, and by 64 per cent. the number graduated in 1904. The most accurate means of determining to what extent the actual cost of training teachers in the normal schools has increased is to compare the quotients obtained by dividing total expenditures by the number of graduates or students for each year. If, for example, we divide total expenditures for the normal schools in 1894 by the number of graduates we find that the average cost of training a teacher in that year was about \$474. In 1904 it was \$547, and in 1914, \$519. It will be seen, therefore, that in 1914 it was actually costing less to train a teacher in the Massachusetts normal schools than in 1904, when salaries of normal school teachers were lower than at present,

and the equipment of the schools less complete. Furthermore, an examination of the appended table shows that the per capita increases over 1894 are in part accounted for by the fact that two of the new normal schools established at that time — namely, at North Adams and Hyannis — have always had a small attendance, and hence the cost per student has been greater than in the larger schools.

The table also shows the ratio of total expenditures to number of students, but a satisfactory comparison between the dates given is rendered difficult for two reasons.

In 1894 many students admitted into the normal schools were not high school graduates, and therefore required three or four years for the completion of their courses. Furthermore, in the earlier years a large number of students attended the normal schools for short periods. Many young women especially formerly attended the normal schools for only one or two terms before obtaining positions. Hence the ratio of membership to number graduating was much greater in 1894 than in 1904 or 1914. In recent years, owing to higher standards in the public schools and more efficient administration in the normal schools, the ratio of graduates to enrollment or to students entering has steadily increased. This is in the interests of efficiency, because the public schools are better served by a man or woman who enters a normal school and completes a regular course than by one who attends for only a short period.

Table showing certain facts as to cost of normal school maintenance.

SCHOOL.	Total maintenance cost, 1893-94.	Number of students, 1893-94.	Number of graduates, 1894.	Cost per student.	Cost per graduate.
Bridgewater,	\$31,697 00	242	62	\$130 97	\$511 24
Framingham,	22,618 43	141	33	160 41	685 41
Salem,	16,098 86	215	59	74 88	272 86
Westfield,	22,006 77	161	40	136 69	550 17
Worcester,	17,549 97	213	38	82 39	461 84
Normal Art,	18,495 05	253	39	73 10	474 23
All schools,	\$128,466 08	1,225	271	\$104 87	\$474 04

Table showing certain facts as to cost of normal school maintenance — Con.

SCHOOL.	Total maintenance cost, 1903-04.	Number of students, 1903-04.	Number of graduates, 1904.	Cost per student.	Cost per graduate.
Bridgewater,	\$45,780 82	255	105	\$179 53	\$436 01
Fitchburg,	28,599 97	133	52	215 04	550 00
Framingham,	32,119 49	196	84	163 93	382 37
Hyannis,	22,595 00	40	15	564 88	1,506 33
Lowell,	29,627 04	185	56	160 15	529 05
North Adams,	28,816 00	88	28	327 45	1,029 14
Salem,	29,886 38	196	75	152 48	398 49
Westfield,	29,134 73	119	49	244 83	594 59
Worcester,	24,724 79	140	42	176 61	588 69
Normal Art,	29,339 23	345	43	85 04	682 31
All schools,	\$300,623 45	1,697	549	\$177 15	\$547 40

SCHOOL.	Total maintenance cost, 1913-14.	Number of students, 1913-14.	Number of graduates, 1914.	Cost per student.	Cost per graduate.
Bridgewater,	\$70,168 03	346	145	\$202 80	\$483 92
Fitchburg,	52,894 62	237	94	223 18	562 71
Framingham,	57,370 00	354	121	162 06	474 13
Hyannis,	26,886 71	47	34	572 06	790 79
Lowell,	32,951 10	142	70	232 05	470 73
North Adams,	45,580 89	148	57	307 98	799 66
Salem,	48,328 01	348	135	138 84	357 99
Westfield,	39,585 42	202	92	195 97	430 28
Worcester,	42,345 52	212	74	199 74	572 24
Normal Art,	52,363 00	268	61	195 39	858 41
All schools,	\$468,473 30	2,304	902	\$203 33	\$519 37

III. Duplication of Courses.

When the commissioner, under direction of the Board of Education, began to study the normal schools of Massachusetts he found that the number of courses advertised did not fairly represent the work of the schools. In some cases announcements were expressions of ideals and ambitions rather than of actual conditions. In the catalogues for 1910 the following courses were announced: —

Bridgewater, . . .	Regular elementary,	Two years.
	Intermediate,	Three years.
	Regular advanced,	Four years.
	Kindergarten-primary,	Two years.
	One year special, for experienced teachers.	
	One year special, for college graduates.	
Fitchburg, . . .	Regular elementary,	Two years.
	Regular advanced,	One year of graduate work above elementary.
	Kindergarten,	Two years.
	One year special, for experienced teachers.	
	One year special, for college graduates.	
Framingham, . . .	Regular elementary,	Two years.
	One year special, for experienced teachers.	
	One year special, for college graduates.	
	Household arts,	Three years.
Hyannis, . . .	Regular elementary,	Two years.
	Regular advanced,	Four years.
	One year special, for college graduates.	
Lowell, . . .	Regular elementary,	Two years.
	Kindergarten,	Two years.
North Adams, . . .	Regular elementary,	Two years.
	Kindergarten-primary,	One year.
	One year special, for experienced teachers.	
	One year special, for college graduates.	
	Department teachers for nature study and agriculture. ¹	
	Department teachers for manual training. ¹	
	Department teachers for domestic arts. ¹	
Salem, . . .	Regular elementary,	Two years.
	Commercial course,	Two years.
Westfield, . . .	Regular elementary,	Two years.
	Regular advanced,	One year of advanced work beyond regular two years' course.
	Kindergarten,	Two years.
	One year special, for experienced teachers.	
	One year special, for college graduates.	
Worcester, . . .	Regular elementary,	Two years.
	Kindergarten,	Two years.
	One year special, for college graduates.	

¹ Advertised as special department courses from the beginning, but in practice taken only as advanced work by students having taken the regular elementary course.

During the years 1911 to 1914 the commissioner and the normal school principals took steps to reduce the number of courses. There were obviously more kindergarten departments in the normal schools of Massachusetts than the demand for kindergarten teachers justified. Hence the kindergarten courses in Lowell and Westfield were discontinued, the systematic training of kindergarten teachers being centered in the Worcester Normal School. Because there was a distinct and obvious demand for primary teachers trained to use kindergarten methods, three of the normal schools — North Adams, Bridgewater and Westfield — continued to advertise kindergarten-primary courses. These courses involved only minor modifications of regular courses, some studies designed to equip teachers for the upper grades being replaced by kindergarten school studies. The latter were offered usually by the kindergarten teacher in the training school. In the latest announcements these courses are no longer called "kindergarten-primary courses," but "primary courses," the latter being now unquestionably the proper designation.

The commissioner also arranged with the principals concerned for the discontinuance of the four years' course in Bridgewater and the four years' course in Hyannis. The announcement of the latter was at all times misleading, since the school was never equipped to maintain a regular four years' course. After prolonged study the four years' course at Bridgewater was discontinued, with the intention that in the near future a four years' course, designed to offer training for prospective principals and superintendents of schools could be substituted; it is intended that students in this course shall first take the elementary school diploma, then, after some years of experience, return for two years of advanced work in supervision and administration.

Superficial consideration of the courses announced as "one year special, for experienced teachers," and "one year special, for college graduates," might lead to the conclusion that special work was being organized for individuals having these qualifications. This has never been the case. The purpose of these special courses was to offer opportunities for experienced teachers, or persons already possessing the general training to be

expected of college graduates, to elect subjects from the regular courses sufficient to entitle them to the diploma of the normal school at the end of the year.

In Fitchburg, Westfield and Lowell a demand had arisen for a third year of work for students of exceptional capacity, who might desire especially to qualify for teaching in the upper grades or for principalship and advanced work. These advertised courses were sometime ago discontinued, the one in Fitchburg being merged in the three years' course for intermediate school teachers.

The situation in North Adams was somewhat peculiar. From 1909 to 1912 a keen interest developed in the teaching of the elements of agriculture, manual training and household arts in rural schools. Superintendents of schools were aware that in most cases teachers with the customary training were not qualified, without special additional preparation, to carry on this proposed work. It was not feasible to employ in rural districts, teachers trained to do departmental work in these subjects only. The North Adams Normal School endeavored to provide instruction whereby persons of exceptional ability might first qualify as regular teachers, and then receive the additional training necessary to do acceptable teaching in these new fields of practical arts. This work was then regarded as experimental. Good results were obtained from it, but because of the tendency of all strong teachers to migrate from rural to urban districts, where more attractive salaries are paid, it has become a serious question whether the training of specially equipped teachers for rural schools can profitably be continued.

In view of the foregoing facts, therefore, it will be seen that, outside of kindergarten courses, there was in 1910 substantially no unnecessary duplication in the special courses offered by the various normal schools. During the next two or three years the commissioner, for the Board of Education, undertook to develop in the Fitchburg Normal School a strong special department for the training of teachers of practical arts for upper-grade boys' classes and for high school positions. This effort has succeeded. In the meantime both the Fitchburg and the Lowell schools announced their readiness to undertake the organization of special departments for the training of depart-

mental teachers of music. Both schools made tentative beginnings without, however, any increase in their teaching force for this purpose. It became evident that the proposed department of music could be developed to best advantage in the Lowell Normal School, and no attempt was thereafter made by the Fitchburg Normal School to continue this work.

On June 9, 1914, the Board adopted rule 31, as follows: —

Courses in Normal Schools.

The regular courses of instruction in the various normal schools shall be as follows, unless otherwise ordered by the Board: —

Bridgewater, . . .	(a) Elementary school teachers' course, (b) Intermediate school teachers' course,	Two years in length. Three years in length, the first year being identical with the first year of the elementary teachers' course.
Fitchburg, . . .	(c) Elementary school teachers' course, (b) Intermediate school teachers' course,	Two years in length. Four years in length, one of which is spent in teaching on a salary. The first year of this course is identical with the first year of the elementary school teachers' course.
Framingham, . . .	(c) Practical arts teachers' course, . . . (a) Elementary and intermediate (combined) school teachers' course. (b) Household arts teachers' course, . . .	Two years in length. Two years in length. Three years in length.
Hyannis, . . .	Elementary and intermediate (combined) school teachers' course.	Two years in length.
Lowell, . . .	(a) Elementary school teachers' course, (b) Music teachers' course, . . .	Two years in length. One year in length.
North Adams, . . .	Elementary and intermediate (combined) school teachers' course.	Two years in length.
Salem, . . .	(a) Elementary school teachers' course, (b) Intermediate school teachers' course,	Two years in length. Three years in length. The first year of this course is identical with that of the elementary school teachers' course.
	(c) Commercial teachers' course, . . .	Three years in length.
Westfield, . . .	Elementary school teachers' course, . . .	Two years in length.
Worcester, . . .	(c) Elementary school teachers' course, (b) Elementary school teachers' course, (c) Kindergarten teachers' course, . . .	Two years in length, one-half year's teaching as apprentice. Three years in length, one full year's teaching as apprentice. Two years in length.
Massachusetts Normal Art School.	(a) Course for special teachers of drawing and practical arts. (b) Special industrial arts courses, . . .	Four years in length. Four years in length.

It is in the light of the foregoing facts that the following criticisms, made in the report of the Commission on Economy and Efficiency, are to be interpreted: —

With the introduction of the household arts course in Framingham, made possible largely through the Hemenway gift, this particular institution had been designated as the exclusive home of this academic activity. This situation, however, did not long obtain, and in 1908, as at the present time, there was an unwarranted duplication of effort in this study in several of the normal schools of the Commonwealth. (Page 210.)

Comment. — The only normal school instruction that could, in any possible way, be regarded as a duplication of the work of the Framingham Household Arts Department was that in the North Adams school, the object of which, as stated above, was to prepare teachers already trained in regular courses for special work in rural schools, — a very different field of activity from that of the Framingham school.

Supplementary instruction was also given in the commercial and household arts courses [in the Fitchburg Normal School]. The instruction given in these two courses was in substance a duplication of the work undertaken at Salem and Framingham Normal schools, and should not have found a place in the curriculum of this school. (Page 249.)

Comment. — It is a mistake to assume that instruction was given to normal school students in the Fitchburg school in commercial or household arts subjects. This instruction was given to pupils from twelve to fourteen or fifteen years of age in the intermediate school of practical arts. These so-called household arts and the commercial subjects were simply portions of a differentiated program of instruction, designed to exemplify for the State, as a whole, a superior type of upper-grade organization. Normal school students did not receive instruction in these subjects.

Neither is it correct to imply that household arts work was given in the Salem Normal School at this time in duplication of the work at Framingham. Such instruction was not offered to normal school students but to upper-grade pupils in the practice school at Salem, the purpose being here also to exemplify a rounded upper-grade program of instruction.

Likewise, the special course in music [in the Fitchburg Normal School] has amounted to competition with the Lowell State Normal School, where satisfactory arrangements have been made for advanced work in this subject. (Page 249.)

Comment. — As indicated above, slight beginnings of specialized instruction in music were attempted at one time in the Fitchburg Normal School, but had been given up entirely before the preparation of the commission's report.

Work in manual training [in the North Adams Normal School, in 1908] then obtaining in the school, and manifestly a duplication of effort of the work so efficiently performed in Fitchburg, should have been stricken from the curriculum. The course in domestic arts, providing a substantial competition with the Framingham Normal School, should have been eliminated, and elimination should have been made of courses offered in agriculture elsewhere taken care of in various educational institutions throughout the Commonwealth. (Page 254.)

Comment. — As a matter of fact, no other normal schools in the State, and no other educational institutions, were offering work duplicating, either in purpose, scope or method, work in the North Adams Normal School. This work was designed solely to enable persons already trained as rural school teachers to become departmental teachers, for purposes not contemplated by the Fitchburg course in manual arts, the Framingham course in household arts, or the work of the Massachusetts Agricultural College. The steps taken at that time, confessedly of an experimental nature, had very specifically in view the rural surroundings of the North Adams Normal School.

Because of this fact [that four years' courses were provided in Bridgewater, Salem and Fitchburg], and for other obvious reasons, equipment of the Hyannis Normal School for work in this line was manifestly an unnecessary addition and duplication of the work undertaken by other normal schools. (Page 259.)

Comment. — This a fair criticism, and it is to be regretted that the Hyannis Normal School was ever permitted to advertise four years' courses, in view of the small attendance on and slight equipment for such courses. (Other comments regarding the work at Hyannis, found on page 260 of the commission's report, are equally justified.)

It is a question, however, as to whether or not the advanced course for teachers and college graduates [advertised by the Lowell Normal School] should not be offered by one normal school of the Commonwealth especially equipped to perform such work. (Page 265.)

Comment. — As indicated above, these were not in any sense distinct courses in the curriculum of the school. They simply represented opportunities for experienced teachers and college graduates to elect subjects sufficient to earn a regular diploma in one year. Nothing could be gained by restricting the attendance of such students to one normal school.

Efforts of these three normal schools [namely, Bridgewater, Salem and Fitchburg], peculiarly and solely designated for such special work [namely, for district superintendents in Bridgewater, for commercial teachers in Salem, and for manual arts teachers in Fitchburg], have been duplicated in unwarranted manner in other normal schools to such extent as to suggest a marked danger of nullification of proper progress and development. (Page 272.)

Comment. — As indicated above, the four years' course in Hyannis was an undesirable duplication of the four years' course at Bridgewater, but there has been no duplication by the other normal schools of the commercial work in Salem or of the manual arts work in Fitchburg.

Work in designing and color, peculiarly a subject of instruction in the Massachusetts Normal Art School, has been unwarrantedly imitated in other normal schools by overzealous principals, and with results of doubtful value. (Page 273.)

Comment. — The commissioner is unaware of any single instance where any normal school other than the Normal Art School has sought to train supervisors or department teachers of drawing and related subjects. Every normal school trains every student in the regular courses to teach drawing as a part of her regular work, but this is not the particular function of the Normal Art School.

Wholesale reduction and elimination of courses throughout the schools is imperative, and should be attempted immediately if the normal school system of Massachusetts is to maintain a standard of efficiency compatible with right progress. (Page 276.)

Comment. — It is nowhere indicated what courses should be included in this wholesale elimination. The dropping of kindergarten courses in two of the schools, the discontinuance of

a rudimentary music course in Fitchburg, and the discontinuance of four years' courses in the Bridgewater and Hyannis Normal Schools, seem to have met all the demands of a sound policy in this direction. This procedure can hardly be called "wholesale reduction and elimination of courses," and was certainly all that is justifiable under present conditions, and substantially all of these changes were being made when the report of the commission was being written.

The most urgent need confronting the State Board of Education is, as has been stated, that of general revision of the courses of studies obtaining in the normal schools; general elimination of unwarranted duplication of effort in legitimate courses of instruction in such schools; and the maintenance of academic uniformity of effort throughout the entire system. (Page 277.)

Comment. — In view of the actual facts cited above further comment seems unnecessary.

IV. Non-functioning Studies.

The report of the Commission on Economy and Efficiency in many places, as indicated below, comments adversely on the presence of so-called "non-functioning studies" in the curricula of the various State normal schools. The commission calls attention to the vote of the Board on May 6, 1880, defining the functions of the normal schools as professional.

The design of the normal schools is strictly professional; that is, to prepare in the best possible manner the pupils for the work of organizing, governing and teaching the public schools of the Commonwealth. To this end there must be the most thorough knowledge: first, of the branches of learning required to be taught in the schools; second, of the best methods of teaching these branches; and third, of the right mental training.

The commissioner, on beginning his work with the normal schools in 1910, held a series of conferences with the normal school principals, in which he raised fundamental questions as to the courses of instruction and among others the question of the elimination of so-called "non-functioning studies." As a matter of fact, at the time there were comparatively few such studies in the courses offered in the various normal schools.

The bulk of the work was of a distinctly professional character, although in certain essential respects the commissioner believed that a more definitely professional direction could be given, even to the courses which, on their face appeared to be professional, or vocational, as the term is now used.

The commissioner found, however, that there were great differences of opinions among the principals and the members of the faculties of the respective schools as to the desirable action to be taken. Even at this time the courses of instruction in the normal schools of Massachusetts were more directly professional in character than those found in similar schools elsewhere. Furthermore, superintendents of schools and other authorities employing teachers were by no means agreed as to the qualities they desire in the graduates. Probably, if a vote had been taken among the superintendents of Massachusetts, a large majority would have agreed that the most conspicuous defect of normal school graduates was in the qualities vaguely described by the word "culture." Many of these superintendents would have added, also, that normal school graduates are lacking in "scholarship," although, as they use this term, it also is susceptible to various conflicting interpretations.

From the outset the commissioner has insisted on a clear distinction being made between the so-called professional and the cultural objects of different normal schools. After many delays a restatement of the courses in all of the normal schools has made clear the distinctions sought for, as a reading of the various normal school catalogues for 1915 will show. The commissioner and the normal school principals find themselves in agreement as to the desirability of offering some studies in each of the normal schools which cannot be said to "function," in the direct sense, professionally. The commissioner has further held that this so-called cultural work may well vary according to the normal school, being determined to some extent by the interests and teaching capacities of strong teachers now in the respective faculties. It is for this reason that in recent years a short course in astronomy has been offered in the Framingham Normal School, an advanced course in English literature in the Fitchburg Normal School, a course in general history in the Westfield Normal School, a course in

practical chemistry (as applied in the discussion of pure foods, and in household arts, etc.) in the Westfield Normal School, and a course in the Household Arts Department of the Framingham Normal School.

The soundness of this procedure seems to be admitted by the commission itself.

Candidates admitted to normal schools have been grounded and instructed in the elementary courses of studies which they expect to teach in future years. Limited review of high school subjects, like review also of different topics taught in secondary schools, is necessary for the pupil entering the normal schools, but the full and real value of the normal school curriculum is best expressed by the instruction received in the art of teaching, the art of imparting knowledge, of school management and the like, rather than in a general wholesale review of subjects already mastered in previous training or in a general attempt to secure information in subjects which will be of no importance to prospective teachers. (Page 277.)

In view of the foregoing statement, therefore, the commissioner believes that many of the comments of the Commission on Economy and Efficiency are more severe than the situation that has existed for the last five years warrants. The following is an example:—

Mindful, therefore, of this point of view, and proceeding with a continued survey of Framingham Normal School, it is observed that, as in the year immediately preceding the reorganization of the Board, the curriculum of the school in 1913 was still burdened to an unwarranted degree with material of no advantage to pupils of normal educational aims and purposes. The curriculum of the school in 1913 was substantially the same as that obtaining in 1908. Millinery had been added, however, and in the catalogue of 1913 this study found a place with astronomy, French and other subjects, all of which were absolutely foreign to elementary educational work. Chemistry, biology, bacteriology, physics and physiology also were to be found in the catalogue for the same year. Just how far the study of these subjects was pursued has not been made plain. It is doubtful if advanced work in such subjects was absolutely necessary for the equipment of a teacher in the advanced household arts course, and it is questionable, therefore, if these subjects should have merited the consideration which doubtlessly they had been receiving in the Framingham Normal School. (Pages 211, 212.)

A very brief course in astronomy in the Framingham Normal School, which was regarded as a part of the work in nature

study, and one in French were continued as definitely cultural courses, representing almost the only subjects in the Framingham school not having a definitely professional aim. The French courses were taken only by household arts students, the faculty of the school believing that they offered a moderate but satisfactory element of cultural training for household arts teachers. All of the instruction in chemistry, biology, bacteriology, physics and physiology was definitely* related to the preparation of household arts teachers, as an examination of the courses will show.

Despite the improvement occasioned by the elimination of these non-functioning studies there remains, nevertheless, an urgent need for further improvement of the curriculum now in vogue at Westfield Normal School. This need becomes marked in the curtailment of such studies as psychology, history of education and science, and in the elimination of the subjects of sociology and general history. The subjects suggested for curtailment, while necessary for normal education, are valueless unless made to operate within a functioning sphere. Those subjects suggested for elimination, such as sociology and general history, are really academic incumbrances and trespasses on the curriculum of any normal school institution. In the curtailment of the science department at this institution attention and correction should be given to the advanced topics under the head of chemistry. These, it is submitted, do not possess a functioning value for the work which normal graduates aim to perform.

As a formal subject of instruction, chemistry has no place in the curricula of the normal schools of the Commonwealth. If the elements of this subject are to be considered at all they should be included in a general and indirect way, and should not be a review of high school work nor an anticipation of the attention given to chemistry in collegiate courses. This is so because chemistry, as it is now taught formally in several of our normal schools, is beyond the scope of functioning value for public school work. (Page 231.)

Doubtless some criticism of the Westfield curriculum is justified, but the commissioner believes that a careful examination of the work offered at any time during recent years under such heads as psychology, history of education and sociology would show that all of these studies had a positive value in the training of teachers. The general history course was never intended to be a professional course, and was given because the instructor made this an attractive and inspiring course by which students generally profited. The situation as regards

chemistry teaching in the Westfield school has been unusual. Formerly, almost all the normal schools offered physics and chemistry. Some years ago it became apparent that these subjects had little or no direct value in the equipment of elementary school teachers. But in the Westfield Normal School L. B. Allyn, teacher of physics and chemistry, became greatly interested in so modifying these subjects for normal school students that their study would result in an extended appreciation of science as applied in everyday life.

As taught in the Westfield school chemistry was actually of great cultural value. The large majority of normal school graduates marry and become home makers within a period of from five to ten years after graduating. Hence it is held by many educators that a course of this kind should be found in every normal school.

The success of Mr. Allyn's efforts has become a matter of common knowledge among educators. In 1914, owing to the extensive demands made upon his time from other sources, Mr. Allyn resigned his position in the normal school. The Board, believing that it would not be possible to find another teacher possessing Mr. Allyn's exceptional interests and qualifications, has therefore discontinued chemistry in the Westfield school.

Despite the improvement in 1913 over the academic work of 1908 there yet remains need for material reduction in the curriculum of the school [Salem Normal School] to meet more accurately needs of the various classes of students. As has been mentioned hitherto it is urged that the existence of non-functioning studies in normal school curricula has not only retarded advancement of the pupils, but likewise has operated to hinder successful work of instructors who should be confined to vital subjects of instruction. The element of added cost to the State also should not be entirely disregarded. (Page 231.)

The commission's report gives but slight clew to what it regards as the non-functioning studies that should have been eliminated from the Salem curriculum in 1913. Physics and chemistry were nominally still in the curriculum, but these were taught wholly from the standpoint of training grade teachers to give instruction in elementary science in upper grades.

With a zeal and spirit that is commendable, Fitchburg Normal School has developed in a remarkable manner, and yet in certain respects this de-

velopment must be queried. The limited catalogue is but suggestive of the work accomplished. It is obvious, however, from information obtained that a total elimination of certain courses, and a reduction in number and nature of subjects offered in other courses, must be made to warrant the proper development of this school. If the present curriculum is maintained with anticipated development, it will mean that the school will continue to outstep the purpose for which it was created, and a manifest duplication of effort with other schools will persist. (Page 250.)

The commissioner is unable, from the report, to ascertain what is meant by the statement as to "reduction in number of subjects offered." At the time in question there were no non-functioning subjects in the Fitchburg Normal School.

Normal schools of Massachusetts should not attempt to emulate the varied and detailed activities of a well-developed collegiate institution, and this seems to have been the aim of the North Adams Normal School, if not in nature at least in extent of the work undertaken. In the heavily overburdened curriculum of the school reduction is imperative, and this should be accomplished in the atmosphere of an absolute change to be made in the viewpoint of this school before it can come within the classification of an efficient normal school of the Commonwealth. (Page 255.)

Here, again, the commissioner is unable to understand the grounds for the criticism as to development of activities of a collegiate nature. Practically the entire curriculum of the North Adams Normal School in 1913 and thereafter consisted of studies designed to prepare teachers for rural schools, in which a demand for specially equipped teachers was developing.

The final and general criticism of the commission is summed up, on page 275 of the report, as follows:—

Incorporation of non-functioning and cultural studies, although marked defects, have been long recognized and permitted in the schools, and this in violation of the real aim and purpose of the normal institutions as expressed by the Board. Although now possessed with a central governing power, and with a central system of control entirely different from that obtaining prior to 1909, the normal schools continue to-day, in certain features, the influence of the past, — each to pursue its own course regardless, in a great many ways, of work performed by kindred institutions; perhaps not altogether regardless, because of the fact that in certain normal schools mentioned as special homes for proper courses success obtained in special instruction has caused undue imitation and activity by other normal institutions.

This is a very much exaggerated statement as to the situation which has existed or which now exists. It is a fact that non-functioning studies have been found in the curricula of the normal schools, but perhaps never to an unjustifiable extent. On the other hand, the commissioner has been convinced that sharper distinctions should have been made between various studies, with a view to defining the exact aims of each, as has been done in the courses of study shown in the catalogues for 1915. The more fundamental defect in normal school courses as now found is not so much in the presence of non-functioning studies as in the partial or incomplete functioning of so-called "functioning studies."

V. Contracts with Towns as to Maintenance of Training Schools.

The report of the commission contains many criticisms of the contracts in force between the Commonwealth and certain municipalities concerning the maintenance of training schools. The Board of Education has been well aware that existing contracts with such municipalities as Westfield, Framingham and Bridgewater are, under present conditions, not equitable. The contracts with Salem and Lowell have recently been rewritten in accordance with what are believed to be sound principles.

The existing situation as regards the unsatisfactory contracts can only be understood in the light of a knowledge of certain historical conditions which have been found in other States as well as Massachusetts. When so-called "model" or "practice" or "training schools" were first proposed for the normal schools, parents, school committees and supervisors looked askance, believing that in such schools the educational interests of the pupils would be sacrificed. As a consequence, at first almost all the normal schools of the United States, in order to have "model" or "practice schools," were obliged to maintain them at their own expense. Gradually the administration of practice schools improved. The time came when but few complaints were made that pupils in these practice schools remained deficient in their education as a result of practice teaching by novices. It was then possible to enter into arrangements with local school authorities whereby the expense of

these schools would be met in part by the town or city as were the expenses for other public schools. Nevertheless, as a consequence of the survival of former prejudices and fears, local communities made only grudging and partial concessions where arrangements for co-operation as regards maintenance were made. Obviously any arrangements between a town and the State for the conduct of a training school must be based fundamentally upon mutual good will. It is a question whether the Legislature can pass laws compelling towns to enter into such contracts. At all times, therefore, the Board of Education was in a position where friendly negotiations and a spirit of "give and take" were required in making working arrangements which later became definite contracts.

When the four new normal schools were established in 1894 one of the conditions stipulated in the statutes locating these schools in certain municipalities was that the town or city in which the school was to be located must provide adequate facilities for "practice teaching." The State was then in a position to impose conditions regarding the new schools. It could not, however, impose similar conditions when schools were already located and built, as at Bridgewater, Westfield, Salem, Framingham and Worcester. These communities have been reluctant to surrender their advantageous position inherited from old conditions.

The Board is agreed on the necessity of rewriting these contracts, except that with Salem, where the new contract is almost entirely satisfactory. For upward of two years the commissioner has been negotiating with the local authorities of Bridgewater, Westfield and Framingham in the hope of finding a mutually acceptable basis of agreement. A large number of local obstacles have arisen. At times the further continuance of friendly relations between those towns and the State, as to the maintenance of the "practice schools," seemed to be threatened.

A more fundamental obstacle has recently been encountered. The authority of the town to make a contract with the State as to maintenance of a training school has been called into question. No legislation apparently exists authorizing the establishment of the earlier "practice schools." Probably leg-

isolation must be obtained definitely authorizing the State, through the Board of Education on the one hand, and the town, through the school committee on the other, to enter into agreements. A bill for this purpose will be presented to the Legislature of 1916.

The validity of the criticisms made of existing contracts, is, therefore, admitted. On one point, however, the commission does not seem to have appreciated certain difficulties arising out of the constitutional provisions as to the fundamental control of public education in the Commonwealth. The following are some quotations from the commission's report on the point in question: —

The jurisdiction of this training department is joint, being divided between the principal of the normal school and the town authorities. (Page 222.)

It is noteworthy, also, in addition to this inequitable situation in the training school [the Westfield Normal School] that there is an unwarranted supervision by the town of the training department located in the normal school building. (Page 228.)

The feature of control so necessary to a document of this nature [*i.e.*, the Salem contract] was not definitely defined. (Page 234.)

In fine, the agreement [with North Adams] does not provide the essential elements of control and management which the State should be able to exercise in work of this kind in connection with the North Adams Normal School. (Page 257.)

The relationship existing between the town of Barnstable and the Commonwealth should be readjusted, with the view of obtaining for the Commonwealth greater powers of management and control in the training school than have been heretofore provided. (Page 262.)

The commission then recommends element of control, not mere privilege of observation, needed by the Commonwealth over all model training schools connected with normal institutions. (Page 288.)

The Board of Education has given much attention to what is here designated "the matter of control over training schools." Quite naturally, towns in which "practice schools" are located desire to retain a large degree of supervision and control over such schools, and, naturally, the normal school authorities, for the sake of their students and the smooth administration of the training school, equally desire a large degree of control. If the training school were supported entirely by the State, then

the normal school authorities could be put in complete charge, and the practice school become, from the standpoint of the local school authorities, in effect a private school. It is the object of the Commonwealth, however, to use the local schools for practice purposes, while at the same time the local community contributes towards their support an amount not less than would be required for the education of the same number of children in its own public schools. In some instances school committees have been quite willing to give to the normal school complete management of the practice school, but any ultimate surrender of the responsibilities of the school committee is undoubtedly estopped by Art. XVIII. of the Amendments to the Constitution of Massachusetts, which reads as follows: —

All moneys raised by taxation in the towns and cities for the support of public schools, and all moneys which may be appropriated by the State for the support of common schools, shall be applied to, and expended in, no other schools than those which are conducted according to law, under the order and superintendence of the authorities of the town or city in which the money is to be expended; and such money shall never be appropriated to any religious sect for the maintenance, exclusively, of its own school.

In making recent contracts, therefore, the effort has been made to give to the normal school authorities the control of administration and even of what is sometimes called "control" without actually impairing the final authority of the school committee. The State Board believes that the contract most recently drawn — namely, with Lowell — does give to the normal school the maximum of control which is consistent with the retention by the city of the final authority vested in it by the Constitution.

VI. Business Activities of the Board.

Certain recommendations of the commission (see Nos. 11, 14, 15 and 16, as quoted below) refer to business activities of the Board in connection with the normal school. The present Board of Education has had the entire matter of the conduct of the business of the normal schools as regards accounting,

the purchase of supplies, the supervision of the up-keep of buildings, and the making of repairs and extensions under consideration since its organization in 1909.

In 1912 it employed an agent whose duties include co-operation with normal school principals in business transactions. The relations of the business agent to the normal school principals have been defined in a number of letters sent to the principals and to the business agent. In general, it is provided that the principal of any given school and the business agent shall be co-ordinate in making recommendations to the commissioner as regards purchase of supplies, making of repairs and extensions, preparation of estimates and the like. The normal school principal and the business agent, after discussion, commonly find themselves in agreement as to essential points; but in case of difference of opinion the matter is referred to the commissioner, and by him, if necessary, submitted to the Board with recommendations. It has not seemed expedient, in matters of business transactions, that the principal should exercise a veto over the recommendations of the business agent, or *vice versa*. The following letter, sent under date of Nov. 30, 1912, to normal school principals and the business agent, is self-explanatory:—

DEAR SIR:—I recently submitted to you a memorandum showing the estimates classified as to major items which the Board has submitted to the Legislature for your school. It is understood, of course, that expenditures incurred under the various heads, prior to the time the appropriations are made by the Legislature, shall not exceed the rate of expenditure for previous years under these heads.

The Board requires that transfers from one division to another of the estimates shall hereafter be made only with its consent.

The Board desires that in the future the principal of each school and the business agent of the Board shall co-operate to the fullest possible extent in securing the efficient and economical expenditure of money appropriated for repairs, supplies, grounds, furnishings, wages and labor, etc. It will be seen that this requirement extends to most of those transactions of the normal schools not having to do with the salaries of the instructors.

In order that the foregoing requirement of the Board may be met, the commissioner suggests that hereafter all proposals for other than minor repairs, and all proposals for the purchase of staple supplies, employment of regular service, etc., shall be prepared either by the department concerned or by the principal of the school, and submitted in writing by the principal, with his approval, to the business agent. The business agent of the

Board will then indicate his approval of the proposal or requisition, after which steps may be taken by either the principal or the business agent to procure for each normal school, or for several together, the most advantageous terms for the execution of the proposal.

It is obvious that the carrying out of the above plan will involve a certain amount of careful planning, especially during January and February of each year, when, as far as practicable, the proposals for repairs to be executed during the year, and for supplies to be purchased, should be submitted in due form. The Board is of the opinion that the plan here contemplated will be found to be a comparatively simple matter, and will give satisfaction in operation.

It is understood, of course, that in conferring upon matters here referred to the principal and the business agent shall stand on an equality, and that in case they differ in opinion on substantial points reference will be made to the commissioner.

The Board wishes that in the purchase of supplies, and in making arrangements for repairs, the lowest possible terms shall be secured by the State, and that the business agent shall, as fully as possible, be in a position to familiarize himself with the means by which this end can be achieved. It is assumed that he will be in a position to deal with some matters of repairs, purchase of supplies, etc., on the business side more directly than the principal. The Board will expect from the business agent early in the spring of each year information as to how the appropriations referred to above are in the main to be expended. Where transactions of any magnitude are involved, the business agent is authorized by the Board to prepare specifications and to negotiate terms with contractors, dealers, etc.

Detailed plans for carrying out above suggestions will be submitted at an early date by Mr. Baldwin as suggestive. The principals are asked to study these carefully. A conference of the principals is herewith called for the evening of December 13, at the City Club, Boston, at 6.30 o'clock, to give these and other matters further consideration.

Respectfully submitted,

DAVID SNEDDEN.

The business agent has been co-operating with the principals to the end that repairs and extensions shall, as far as possible, be made under a system of competitive bidding on the basis of detailed plans and specifications, the contract being awarded, whenever practicable, to the lowest bidder. Similarly, as far as possible, supplies have been purchased on the same basis. Steps have also been taken to develop a plan whereby several of the normal schools may jointly standardize staple supplies, and thus obtain the benefit of reduced rates under competitive purchasing.

As regards centralized accounting, the commissioner is of the opinion that it would not be profitable to establish this method unless it were coupled with the centralizing of the business activities of the Board, as specified in recommendation No. 16, below. It is desirable that the accounting for the schools shall be kept as close as practicable to the center, or centers, where most of the business transactions are carried on. At present a uniform system of accounting, established by the office of the Auditor of the Commonwealth, prevails among the normal schools, and all bills, schedules, etc., are transmitted to the Auditor through the office of the Board of Education, after they have been carefully examined.

The recommendation of the Commission on Economy and Efficiency, that the office of treasurer of the Board of Education be re-established, seems unnecessary at the present time, inasmuch as the offices of the Board handle only incidental funds, and have comparatively little direct bookkeeping.

The final recommendation of the commission, that the business activities of the normal schools should be centralized exclusively within the office of the business agent of the Board, is an important one, and requires careful consideration. Many questions of administration of a complicated and difficult nature are involved. Definite action along the lines recommended by the commission could be taken only after changes have been made in a number of existing conditions over which the Board has at present but limited control. Nevertheless, it is believed that the recommendation of the commission points to developments that must ultimately be made in the interests of sound administration.

VII. Summary.

The recommendations of the Commission on Economy and Efficiency are summarized on pages 287 and 288 of their report, as follows:—

1. Reduction of courses in normal schools in accordance with a properly established functioning standard.
2. Uniformity of instruction in fundamentals throughout the normal school system.
3. Elimination of duplication throughout the system of special courses offered in certain schools.

4. Definite readjustment of entire academic status of Bridgewater Normal School.

5. Proper establishment of the powers and duties of the director of art education, providing more intimate study and supervision of local and institutional needs and activities in matters properly within the jurisdiction of such official.

6. Reorganization of the Massachusetts Normal Art School to effect a proper compliance with the laws influencing and authorizing creation and continuance of such school.

7. Definite establishment of weekly seminars in normal schools for practical teachers, and correlation of this work with instruction offered at the summer session of the Hyannis Normal School, in event of continuance of this institution as a normal school.

8. Reformation of contracts providing for training school facilities in connection with the normal schools in accordance with an equitable standard of expense occasioned parties to such agreements.

9. Element of control, not mere privilege of observation, needed by the Commonwealth over all model training schools connected with normal institutions.

10. Change in phraseology of law relative to appropriations for normal schools, providing for the distribution of such appropriations under the control of the Board of Education.

11. Centralized system of accounting for normal schools.

12. Increase of tuition for non-resident pupils attending normal schools, such to approximate the per capita cost of instruction in the several institutions.

13. Improvement in publications of the State Board and of the normal schools.

14. More complete definition by the Board of the powers, duties and scope of activity of the business agent.

15. Re-establishment of the office of treasurer of the State Board of Education; definition of powers and duties of such agent.

16. Delegated administration of approved business activities relative to normal schools, to be centralized exclusively within the office of the business agent of the Board.

Of these recommendations all have been discussed already except Nos. 2, 5, 6, 7 and 12.

The recommendation that uniformity of instruction in fundamentals throughout the normal school system should prevail raises an issue that has been considered at length by the normal school principals, the commissioner and the Board. The conclusions reached were set forth in the seventy-eighth annual report of the Board, pages 15 to 42. They may be summarized as follows: —

(a) It is desirable that the normal school principals and the commissioner should prepare, and frequently revise, a standard course of instruction in each distinctive field of normal school work in the Commonwealth. This standard course of instruction should embody, as nearly as practicable, the collective judgments of the principals and the commissioner.

(b) The principal and faculty of any individual school, in preparing or revising courses of instruction for submission to the Board for approval, should make adaptations to local conditions, and should provide for special developments of an experimental character, but the extent and character of variations thus made from the standard course of instruction referred to under (a) should be clearly indicated.

(c) In other words, a sound administrative policy requires that each normal school be encouraged to individualize its work and to make moderate variations from the standard course so long as these variations are clearly indicated as being conscious and purposeful.

As regards the powers and duties of the director of art education, these are now clearly defined by the Board. Owing to press of work in connection with recent reorganizations required in the work of the school, and in supplying the Board with the information to submit to the Legislature in connection with requests for appropriations for a new site and building for the school, the director has not had time to give full attention to all the duties assigned him.

The reorganization of the Massachusetts Normal Art School is proceeding as rapidly as circumstances permit. The functions and status of this school, as viewed by the Board of Education, will be presented in a bulletin later to be submitted to the Legislature.

The Board regards as excellent the suggestion that weekly seminars be established in the normal schools. As soon as the necessary service can be provided this work will be begun. At the present time each member of the faculties of the respective schools is working to the utmost to meet the needs of the regular classroom work.

The recommendation that tuition charges for non-resident pupils should be increased raises an issue that has many times

been considered by the Board. The subject is not a simple one. It is a fact that the majority of non-resident students trained in the Massachusetts normal schools ultimately become teachers in this State. The primary object of the normal schools is not to supply free education for residents of Massachusetts, but to produce the largest possible supply of trained teachers for the public schools of the Commonwealth. It is probable that a tuition rate substantially equal to the per capita cost of instruction would shut out from the normal schools of Massachusetts many desirable students from neighboring States. The injury resulting therefrom would be chiefly to the public schools of Massachusetts. The matter, however, requires careful consideration. Non-residents are not now admitted to any normal schools where the number of residents applying for admission is sufficient to fill the maximum quota established by the Board.

C. PROPOSED LEGISLATION.

The Board of Education submits the bills given herewith to the Legislature of 1916, and asks that favorable consideration be given them.

Accompanying the text of each bill is a brief statement of the reasons which have led the Board to ask for its enactment.

I. PROPOSED ACT RELATIVE TO STATE CERTIFICATION OF TEACHERS.

Be it enacted, etc., as follows:

SECTION 1. After July first, nineteen hundred and seventeen, no person shall be eligible to teach in a public school in any city or town in the commonwealth who does not hold a certificate issued by the board of education in accordance with section two of this act.

SECTION 2. The board of education shall define the conditions under which teachers' certificates shall be granted and held, and shall grant certificates to candidates found qualified by examination or otherwise, but any person who shall have served prior to July first, nineteen hundred and seventeen, as teacher for a continuous period of not less than six months in the public schools of the commonwealth, shall be entitled to certification as a teacher under this act. It is provided further that the school committee of any city or town may require, as condition of service in the public schools of such city or town, such qualifications as it may deem desirable, in addition to those required for certification by the board of education.

SECTION 3. The board of education shall grant state teachers' certificates to any persons whom a duly qualified board of examiners, appointed by the school committee of any city or town, shall approve for service in the schools of said city or town, providing the standards for such approval shall, in the judgment of the board of education, be equal at least to those established for state certification by the board of education.

SECTION 4. This act shall take effect upon its passage.

Historical Note.

The Board of Education submitted to the General Court of 1914 a bill providing for State Certification of Teachers in Schools in Superintendency Unions. This bill was referred by the Legislature to the General Court of 1915.

During the hearings before the committee on education in 1915, in accordance with suggestions from superintendents of schools, the bill was amended so as to apply to all towns and cities in the State. This bill was referred to the General Court of 1916. The Board of Education requests the General Court to take from its files the above bill.

Explanatory Notes.

The reasons for the above legislation can be summarized as follows: —

1. State certification of teachers would be of advantage to public schools because it would —

(a) Eliminate many incompetent and untrained candidates for teaching positions.

(b) Act as a check and restraint on school committees if these are disposed to elect teachers on other grounds than merit.

(c) Encourage persons intending to become teachers to make adequate preparation for that work.

(d) Make it possible to establish and maintain standards of preparation, fitness and skill whereby gradual improvement of public school teaching could be secured.

(e) Provide means whereby normal school graduates may be retained for a reasonable time in the service of the State, which has met the cost of such training.

(f) Provide a means of controlling and checking the shifting of teachers from position to position throughout the year, to the detriment of pupils in the public schools.

(g) Assure preference in employment to teachers for secondary school positions who have made adequate preparation therefor. Such preparation, in turn, will encourage colleges to extend and develop their departments of education.

About 150 teachers without any form of professional training annually enter service in the elementary schools of the Commonwealth. At present, with the exception of State-aided high schools, there are no requirements established by the State with regard to preparation for teaching in the high schools of the Commonwealth. Certification would therefore raise the standard of preparation of teachers in both elementary and high schools.

Inadequately trained teachers are employed frequently in a number of communities where a disposition exists to secure teachers at the lowest possible salaries, and with slight regard to their professional qualifications.

In operation a certification measure would not guarantee the complete professional fitness of each individual certificated, but it would at least restrict the school committee in its elections to teachers who have met stated minimum standards of scholarship. The superintendent of schools is now required by law to recommend teachers, but he is often hampered by pressure from incompetent candidates. The proposed law can be so administered that teachers entering service in Massachusetts for the first time must be normal school graduates or have had an equivalent education. This is manifestly a desirable policy, in view of the fact that Massachusetts now maintains nine normal schools for training teachers for elementary school teaching.

In operation a certification law could also be made to have the effect of lessening the shifting of teachers from one position to another during the school year, a practice which is detrimental to the schools involved.

The certification of high school teachers would undoubtedly result in a large extension of the services now rendered by colleges in Massachusetts, and in the other New England States, in preparing such teachers. In time, a year of graduate work, including practice teaching, might be required as a condition of appointment to a position as teacher in a Massachusetts high school.

2. State certification of teachers will operate to the advantage of teachers by —

(a) Protecting candidates for teaching positions, who have made preparation in normal school or college, from the competition of untrained and unfit candidates.

(b) Causing an increase in wages, especially where inadequate salaries are paid, as in smaller and less favored communities.

(c) Promoting the welfare of the schools, a result which reacts beneficially on teachers.

At present fully qualified teachers, trained in Massachusetts, often fail to secure positions in this State because untrained and incompetent candidates are preferred by some school committees. As long as the number of candidates offering themselves for teaching positions is in excess of the demand, no injustice to the applicant and no detriment to the schools is involved in raising standards.

Once protected against the competition of the untrained and unfit, many persons will be encouraged to make adequate preparation for the calling of teacher. The community will be ready to pay for better service rendered as soon as its superiority is demonstrated. Improvement in schools, resulting from the employment of better teachers, leads to better working conditions for teachers, and such conditions will in turn increase the supply of persons prepared to meet any reasonable increase in standards.

Massachusetts has recently established a system of retirement allowances for teachers, and has also enacted a law on tenure which adequately protects the teacher in service. It should be impossible for persons manifestly unfit and incompetent to secure the protection and benefit of these provisions. The experience and practice of other States in regard to State certification of teachers give full justification for the introduction of such a system into Massachusetts.

In the light of the experience of other States the following administrative procedures would undoubtedly be developed: Elementary school teachers' certificates might be granted on the basis of either credentials or examination. Graduates of Massachusetts normal schools and of normal schools in other States equal in standing to those of Massachusetts would at

first receive provisional certificates, valid for two years or more. The full diploma of graduation would be given after two or more years of acceptable experience. A certificate might be revoked for improper conduct, and the offender thus made ineligible to teach in Massachusetts. Certificates for teachers in high schools would be granted in most cases on the basis of credentials from colleges. Standards for this certification could gradually be raised by co-operation with colleges. A desirable standard for a secondary school teacher's certificate should eventually be the completion of a graduate year of professional work. It might be desirable that an advisory council of five persons be appointed by the Board, two to be designated by the Massachusetts State Superintendents' Association, two by the Massachusetts State Teachers' Association, and the fifth to be chosen by the above, and that any general policies regarding certification should be submitted to the consideration of this council.

II. PROPOSED ACT RELATIVE TO REGISTRATION OF MINORS.

Be it enacted, etc., as follows:

SECTION 1. Section three of chapter forty-three of the Revised Laws, as amended by chapter four hundred and forty-three of the acts of the year nineteen hundred and fourteen, is hereby further amended by striking out the word "annually" in the second line, and by striking out the words "on the first day of September, and such record shall be completed on or before the fifteenth day of November", in the tenth, eleventh and twelfth lines, and by adding at the end thereof, the words: — Attendance officers or the attendance department, under the direction of the school committee and superintendent of schools, shall have charge of the records required by this section, and shall be responsible for their completeness and accuracy. A card, as prescribed by the board of education, shall be kept for every child whose name is recorded under the provisions of this section. Principals, teachers and supervisory officers shall co-operate with attendance officers in the discharge of their duties under this act. Said attendance officers shall compare the names of persons enrolled in the public and private schools of each town or city with the names of persons recorded as required by this act, and examine carefully into all cases where persons of school age are not enrolled in, and attending some school, as required by section one of chapter forty-four of the Revised Laws, as amended by chapter three hundred and twenty of the acts of the year nineteen hundred and five, chapter three hundred and eighty-three of the acts of the year nineteen hundred and six, and section one of chapter seven hundred and

seventy-nine of the acts of the year nineteen hundred and thirteen. The annual school committee report of each city and town shall contain a statement of the number of persons recorded as required by this act, classified by ages, together with a statement of the number attending public or private schools, and the number not attending school in any given year, as required by section one of chapter forty-four of the Revised Laws, as amended by chapter three hundred and twenty of the acts of the year nineteen hundred and five, chapter three hundred and eighty-three of the acts of the year nineteen hundred and six, and section one of chapter seven hundred and seventy-nine of the acts of the year nineteen hundred and thirteen, — so as to read as follows: — *Section 3.* The school committee of each city and town shall ascertain and record the names, ages and such other information as may be required by the board of education, of all children between five and seven years of age, of all children between seven and fourteen years of age, of all children between fourteen and sixteen years of age, and of all minors over sixteen years of age, who cannot read at sight and write legibly simple sentences in the English language, residing in its city or town. Whoever having under his control a minor over five years of age withholds information sought by a school committee or its agents, under the provisions of this section, or makes a false statement relative thereto, shall be punished by a fine of not more than fifty dollars. Attendance officers, or the attendance department, under the direction of the school committee and superintendent of schools, shall have charge of the records required by this section, and shall be responsible for their completeness and accuracy. A card, as prescribed by the board of education, shall be kept for every child whose name is recorded under the provisions of this section. Principals, teachers and supervisory officers shall co-operate with attendance officers in the discharge of their duties under this act. Said attendance officers shall compare the names of persons enrolled in the public and private schools of each town and city with the names of persons recorded as required by this act, and examine carefully into all cases where persons of school age are not enrolled in and attending some school, as required by section one of chapter forty-four of the Revised Laws, as amended by chapter three hundred and twenty of the acts of the year nineteen hundred and five, chapter three hundred and eighty-three of the acts of the year nineteen hundred and six, and section one of chapter seven hundred and seventy-nine of the acts of the year nineteen hundred and thirteen. The annual school committee report of each city and town shall contain a statement of the number of persons recorded, as required by this act, classified by ages, together with a statement of the number attending public or private schools, and the number not attending school in any given year, as required by section one of chapter forty-four of the Revised Laws, as amended by chapter three hundred and twenty of the acts of the year nineteen hundred and five, chapter three hundred and eighty-three of the acts of the year nineteen hundred and six, and section one of chapter seven hundred and seventy-nine of the acts of the year nineteen hundred and thirteen.

SECTION 2. Section four of chapter forty-three of the Revised Laws, as amended by chapter three hundred and sixty-eight of the acts of the year nineteen hundred and twelve, chapter three hundred and fifty-six of the acts of the year nineteen hundred and thirteen, and chapter four hundred and forty-three of the acts of the year nineteen hundred and fourteen, is hereby further amended by striking out the words "according to the school census taken" in line nine, and by striking out the word "September" in the tenth line, and inserting in place thereof, the word: — April, — so 'as to read as follows: — *Section 4.* The chairman of each school committee shall annually, on or before the thirty-first day of July, transmit to the commissioner of education a certificate filled out, signed and sworn to by him, containing the following statements: —

First. The number of persons between the ages of five and seven years, the number of persons between the ages of seven and fourteen years, and the number of persons between the ages of fourteen and sixteen years, residing in the town (or city) on the first day of April last preceding the date of this certificate.

Second. The number of persons in the average membership of the public schools of the town (or city), for the school year last preceding the date of the certificate, as determined by the rules of the state school register.

Third. The amount of money raised by taxation by the town (or city), and expended during the fiscal year last preceding the date of the certificate for the support of the public schools, including the wages of teachers, the transportation of school children, fuel, the care of fires, schoolrooms and school premises, repairs, supervision, text-books and supplies and school sundries or incidentals, but excluding alterations of school buildings, other than repairs, and construction of schoolhouses and contributions for the support of public schools which may be received from the commonwealth or from other sources than local taxation, and also the total expenditures, classified, for the public schools during the school year last preceding the date of this certificate.

Fourth. That the town (or city) has maintained during the school year last preceding the date of this certificate each of the schools, as required by section one of chapter forty-two of the Revised Laws, as amended by chapter one hundred and eighty-one of the acts of the year nineteen hundred and eight, and by chapter five hundred and twenty-four of the acts of the year nineteen hundred and ten, for a period of not less than thirty-two weeks, or twenty-eight weeks, if such reduction has been allowed under the provisions of the aforesaid section.

Fifth. That the town (or city) has maintained, during the school year last preceding the date of this certificate, a high school, as required by section two of said chapter forty-two, for a period of months, days, as stated.

The board of education is authorized and directed to prepare and furnish to school committees suitable forms of the certificate required by this section.

Explanatory Notes.

1. The present school census is worthless as a means of enforcing attendance legislation, and has no substantial value for other purposes.

2. The enforcement of attendance legislation, as well as the enforcement of the laws relating to the employment of minors, requires that the officials in charge should have complete and frequently revised lists of all persons in their communities coming under the provisions of the laws in question. In some more progressive cities and towns the attendance officers are even now keeping such lists.

3. The proposed system of registration would greatly improve compulsory attendance service without materially increasing its cost.

4. It would also serve the following specific purposes: —

(a) Authorities charged with the education of the deaf, blind and otherwise defective could at any time readily obtain information regarding these cases.

(b) The amount of the schooling received by each child, whether in public or private school or at home, would be a matter of record to which reference could be made at any time.

(c) In the event of proposed changes in attendance or employment legislation data would be readily accessible regarding the numbers of minors who would be affected.

(d) In making provision for additional school accommodations registration data could easily be used as a means of estimating probable needs in the near future.

(e) All the data recorded would eventually have value for purposes of historical and other research.

(f) It would facilitate the process of transferring the child's record to other places when he moves.

(g) It would facilitate co-operation of the school authorities with other public officials and with private agencies in securing the maximum safeguarding of the child's educational interests.

Probable Administrative Procedure.

In large cities and towns employing attendance officers, trained and expert in that field of service, the establishment and maintenance of a record of all persons from five to sixteen years of age, and of illiterate minors above sixteen years, can be accomplished with economy and thoroughness despite the large number of children to be registered and frequent changes in residence. In fact, it is probable that in a number of cities the data are now in the possession of attendance officers.

Experience shows the desirability of providing a card record, similar to the form of census card now in use, for each child, and of assembling these cards in files, either at the several schoolhouses of the district, in a central school in some district, or in the office of the superintendent of schools of the city or town.

In smaller communities, where attendance officers are not always well trained and equipped for their work, and where, in many cases, such service is not supervised by a specialist, the superintendent of schools should closely supervise the method of securing information, recording data and keeping the lists.

The school committee in putting the law into effect should, through the superintendent of schools, instruct the attendance officers to establish as soon as possible a complete list of all persons between the ages stipulated in section 1 of the act. In large communities each attendance officer should be able to keep the records of approximately 5,000 children. Some variations from this number may be desirable. In case the area is a difficult one in which to enforce the attendance laws a reduction in this number will be desirable.

For the purpose of making returns to the Board of Education the superintendent of schools will secure from the school attendance officer or officers statements as to number of persons registered, classified as to ages, and the number of persons in each group attending public schools, private schools, special institutions or not in school.

III. PROPOSED ACT TO PROVIDE FOR THE PARTIAL REIMBURSEMENT TO CERTAIN TOWNS HAVING LESS THAN FIVE HUNDRED FAMILIES FOR THE SALARIES OF HIGH SCHOOL TEACHERS.

Be it enacted, etc., as follows:

SECTION 1. Every town having, according to the latest census, state or national, less than five hundred families, and having a valuation per pupil in the average membership of its public schools less than the corresponding ratio for the commonwealth, and which has expended from funds raised by local taxation for the support of its public schools a sum more than four dollars on each one thousand dollars of valuation during the fiscal year ending on the thirty-first of the preceding December, shall, if it maintains a high school approved by the board of education as to organization, equipment and instruction, be entitled to receive annually, on or before the first day of November, from the treasury of the commonwealth, a partial reimbursement for net expenditure for high school instruction; as provided in sections two, three and four of this act. But no town which establishes a high school after January first, nineteen hundred and sixteen, shall be entitled to receive such reimbursement, unless the establishment of such school is approved by the board of education.

SECTION 2. When such a town, during the fiscal year ending on the thirty-first of the preceding December, shall have raised by local taxation and expended for the support of its public schools a sum more than four dollars but not more than five dollars on each one thousand dollars of valuation, as determined by the assessors of said town for said fiscal year, then the reimbursement shall equal thirty per cent. of the net expenditure for high school instruction as defined by section three of this act; and when said expenditure for the support of public schools is more than five dollars but not more than six dollars on each one thousand dollars of said valuation, then the reimbursement shall equal forty per cent. of said net expenditure for high school instruction; and when said expenditure for the support of public schools is more than six dollars on each one thousand dollars of said valuation, then the reimbursement shall equal fifty per cent. of said net expenditure for high school instruction. But said reimbursement shall not, for any school year, exceed the product of forty dollars by the average number, not exceeding twenty-five, of pupils over fourteen years of age, resident in the town and members of that high school, for that school year, increased by the sum obtained by multiplying twenty dollars by the excess, if any, in the average membership of such pupils over twenty-five but not over seventy-five.

SECTION 3. For the purposes of this act the net expenditure for high school instruction for any school year ending June thirtieth shall equal the expenditure by the town for salaries and expenses of the high school prin-

principal and supervisors, and salaries of high school teachers diminished by the total amount, if any, charged by said town for tuition of pupils resident in other cities or towns and attending the high school during that school year. But if any principal, supervisor or teacher gave instruction both to high school classes and to classes below the high school, the portion of the salary of such principal or teacher charged to the high school shall not be greater than the ratio that the time he devoted to instruction of high school classes bore to the entire time that he devoted to the instruction of all classes.

SECTION 4. If the reimbursement provided by sections two and three of this act shall be less than five hundred dollars for any town entitled to receive such reimbursement by section one of this act, then the amount to be received by such town shall be increased to five hundred dollars.

SECTION 5. Chapter two hundred of the acts of the year nineteen hundred and six, as amended by chapter four hundred and twenty-seven of the acts of the year nineteen hundred and eight, is hereby repealed.

SECTION 6. This act shall take effect January first, nineteen hundred and seventeen.

Explanatory Notes.

1. In the case of towns with less than 500 families, having a valuation per pupil less than the corresponding ratio for the Commonwealth, the State now bears a far larger proportion of the cost, and pays more per pupil, for high school education in towns that do not maintain high schools than it does in the case of towns that do maintain such schools, as shown below: —

(a) Such a town not maintaining a high school receives a reimbursement for tuition expenditures equal to the entire expenditure if the valuation of the town does not exceed \$1,000,000, and otherwise, equal to one half the expenditure. For the year ending June 30, 1914, 89 towns received such reimbursement, 75 of them receiving full reimbursement and 14 receiving half reimbursement. The amount paid by the State for this purpose was \$56,152.29, or an average of \$43.46 per pupil.

(b) A town with less than 500 families, not maintaining a high school, receives reimbursement in whole or in part for transportation expenditures (not exceeding \$1.50 per week per child), provided that the town pays at least \$4 per \$1,000 valuation for the support of public schools. For the year ending June 30, 1914, the amount paid by the State for this purpose was \$19,188.24, or an average of \$20.47 per pupil.

(c) But if a town with less than 500 families, having a valu-

ation per pupil less than the corresponding ratio for the Commonwealth, maintains a high school approved by the Board of Education, it receives annually only \$500 toward the support of that high school. For the year ending June 30, 1914, the State paid for the education of these pupils an average of only \$12.88 per pupil.

2. Many towns not now maintaining high schools, and therefore relieved of the entire cost of high school education, would receive only \$500 annually if they established high schools. They naturally prefer to continue to allow the State to support high school education for them, even when a local high school would be a decided advantage.

3. The 47 State-aided high schools at present find it extremely difficult to secure, as principal and teachers, persons of ability. They cannot retain the services for a period of years of experienced teachers, nor employ a sufficient number of teachers to offer the variety of subjects needed.

4. The following are essential features of the bill:—

(a) Section 1 limits the aid to towns having a valuation per pupil less than the corresponding average for the Commonwealth. The present \$500 grant for high schools is now similarly restricted. It also limits the State aid to towns that expend for the support of public schools more than \$4 per \$1,000 valuation from funds raised by local taxation, but this limitation will apply to few towns, if any.

(b) Section 2 provides that the percentage of the reimbursement shall be 30 per cent. of the net expenditure for high school instruction in case the expenditure for support of public schools from funds raised by local taxation was more than \$4 but not more than \$5 per \$1,000; 40 per cent. in case the expenditure was more than \$5 but not more than \$6 per \$1,000; and 50 per cent. in case the expenditure exceeded \$6 per \$1,000.

(c) Section 3 determines the method of computing the "net expenditure for high school instruction." It provides that high school tuition received from other towns shall be deducted in obtaining this net expenditure. It also determines the portion of salaries that may be charged to high school instruction in the case of a teacher who divides his time between high school and elementary school.

(d) Section 1 provides that the high school, in order to receive the reimbursement for salaries of high school teachers, must be approved by the Board of Education as to organization, equipment and instruction. The passage of this act would, therefore, make it possible for a two-year high school to receive State aid, but the town would undoubtedly be required to pay tuition and transportation to high schools of other towns or cities for pupils in the last two years of a four-year high school course, as a condition of approval by the Board of Education.

If this act had been in effect this year it is estimated that on the basis of expenditures last year the 46 towns that did receive the present State grant of \$500 each, that is, a total of \$23,000, would have received instead a total of about \$40,000.

IV. PROPOSED RESOLVE RELATIVE TO INVESTIGATION OF COUNTY TRAINING SCHOOLS.

Resolved, That the board of education is hereby authorized and directed to investigate the county training schools, with particular reference to the methods employed for the instruction and training of children committed thereto as habitual truants, absentees or school offenders. The board is authorized to employ such agents as may be necessary to collect pertinent information, and shall report the results of its investigation, together with such recommendations as it may deem relevant, to the general court not later than the third Wednesday in January, nineteen hundred and eighteen. For the purpose of this resolve, there shall be allowed and paid out of the treasury of the commonwealth a sum not exceeding two thousand five hundred dollars.

The Existing Authority of the Board of Education.

Chapter 46, section 2 of the Revised Laws, relating to public instruction, says: —

County truant schools shall be subject to visitation by the board of education and by the state board of charity, and said boards shall report thereon annually to the general court.

The management of the county training schools is, under the terms of section 1 of the chapter above mentioned, entirely in the hands of the county commissioners of the several

counties in which these schools are located. The visitation and report provided for in section 2 can now be only of a perfunctory and formal character.

V. PROPOSED ACT RELATIVE TO RULES AND REGULATIONS OF SCHOOL COMMITTEES.

Be it enacted, etc., as follows:

SECTION 1. The school committee of every city and town shall annually prepare and publish a code of rules and regulations whereby the conduct of the business of the committee shall be governed, and in which the duties and responsibilities of the school committee and of the superintendent of schools shall be defined.

SECTION 2. The rules and regulations required by section one of this act shall define and govern the procedure of the school committee in its general control and administration of the public schools, including the selection and purchase of text-books and supplies, the care of school buildings, the appointment and supervision of janitors, the keeping of accounts, the making of reports, the dismissal of teachers, the promotion of pupils, and the assignment of duties to school physicians.

Explanatory Notes.

Authorities on school administration are agreed that the establishment and maintenance of right relations between the school committee, the superintendent of schools and the several members of the teaching force are very largely dependent upon the adoption by the school committee of a code of rules and regulations governing its procedure and defining the powers and responsibilities of the respective officials concerned.

The first annual conference of superintendents of schools, held at Cambridge under the auspices of the Board of Education in June, 1915, asked the Board to appoint representatives to serve with a committee from that body to formulate legislation more clearly to define and differentiate the functions of the school committee and the superintendent of schools.

Definite progress has been made in the Commonwealth in the way of establishing businesslike procedure in the administration of the public schools. Probably two thirds of the school committees in this State are now conducting business in accordance with the printed rules and regulations. In view of

the general acceptance of this feature of school administration it seems desirable that, by legislation, the practice should be made universal.

VI. PROPOSED ACT RELATIVE TO THE ESTABLISHMENT AND MAINTENANCE OF A SEWER SERVICE FOR THE STATE NORMAL SCHOOL AT FRAMINGHAM.

Be it enacted, etc., as follows:

SECTION 1. The board of education is hereby authorized to contract, on behalf of the commonwealth, with the town of Framingham, for the establishment and maintenance of a connection with the system of sewage disposal of said town of Framingham with the buildings of the state normal school at Framingham, on the following conditions: three thousand dollars to be paid by the treasurer and receiver general of the commonwealth to the town of Framingham when said connection with the sewer system of the town of Framingham has been made to the satisfaction of the board of education; six hundred dollars to be paid annually by the treasurer and receiver general of the commonwealth to said town of Framingham, provided the number of teachers, pupils and employees in said normal school shall not be less than three hundred and fifty nor more than four hundred; and further provided that if, in any year, the number of teachers, pupils and employees in said normal school shall exceed four hundred, then there shall be paid annually to said town, in addition to six hundred dollars, the sum of ten dollars for each ten persons of said teachers, pupils and employees in excess of four hundred; and if, in any given year the number of said teachers, pupils and employees shall be less than three hundred and fifty, then the town of Framingham shall remit to the commonwealth ten dollars for every ten persons of teachers, pupils and employees constituting the difference between three hundred and fifteen and the actual number of said teachers, pupils and employees. The commonwealth shall, in addition, pay for all expenses of labor or material otherwise necessary to connect said buildings with the sewer extensions in the street or streets of said town of Framingham.

SECTION 2. The sum of three thousand dollars is hereby appropriated from the amount of one hundred and forty-five thousand dollars, appropriated by chapter one hundred and forty-one of the resolves of the year nineteen hundred and fourteen, said three thousand dollars to be paid to the town of Framingham when the connection with the sewer system of said town and the normal school buildings at Framingham shall have been made to the satisfaction of the board of education.

SECTION 3. This act shall take effect upon its passage.

Explanatory Notes.

At present the sewage of the normal school buildings at Framingham is disposed of in its own sewer beds. These beds are a constant source of annoyance and expense. Furthermore, the dormitory, completed this year, has put an additional burden upon the existing system of sewage disposal. Under the circumstances it would be necessary, unless other arrangements are made, to increase the sewage beds and enlarge the drains connecting the same with the buildings.

Since the passage of the resolve — chapter 141 of the Resolves of 1914 — appropriating money for the building of a dormitory at Framingham, the Legislature has authorized the towns of Framingham and Saxonville to construct a sewer, which will be laid adjoining the normal school property.

It seems, therefore, highly desirable that the State should abandon its present system of disposal of the sewage at the Framingham Normal School, and arrange to enter the town system of Framingham and Saxonville.

In response to a communication from the Board of Education, the assistant to the Attorney-General has ruled that the Board of Education is not authorized, by chapter 141 of the Resolves of 1914, to enter into any contract with the town of Framingham for connecting the drains and sewer pipes from the State normal school at Framingham with the town sewer system; consequently, the accompanying act has been drawn up in order to authorize the Board to make such a contract, and to authorize, further, the payment of \$3,000 from the appropriation of \$145,000, as made by chapter 141 of the Resolves of 1914.

VII. PROPOSED ACT RELATIVE TO STATE CERTIFICATION OF
SUPERINTENDENTS OF SCHOOLS IN THE COMMONWEALTH OF
MASSACHUSETTS.

Be it enacted, etc., as follows:

SECTION 1. After July first, nineteen hundred and seventeen, no person shall be elected as a superintendent of schools in any city or town in the commonwealth who does not hold a certificate issued by the state board of education, in accordance with section two of this act.

SECTION 2. The state board of education shall define the conditions on which certificates of eligibility as superintendents of schools shall be granted and held, and shall grant such certificates to candidates found qualified by examination or otherwise; but any person who shall have held, prior to July first, nineteen hundred and seventeen, a position as superintendent of schools for a continuous period of not less than one school year in any city or town of the commonwealth, shall be entitled to certification as a superintendent of schools without examination.

SECTION 3. This act shall take effect upon its passage.

Explanatory Notes.

1. The proposition to certificate all superintendents of schools in the State originated at the conference of superintendents held at Cambridge, in June 1915. A resolution to this effect, there adopted, was reaffirmed at the meeting of the Massachusetts Superintendents' Association, held at Worcester, Oct. 15, 1915, by a vote of 27 to 4. The Board of Education, therefore, by request submits the above bill to the Legislature.

2. At present, by virtue of the authority of chapter 215 of the Acts of 1904, no person is eligible to election as a superintendent of schools of a union who does not hold a certificate issued by the State Board of Education. The effect of this requirement has been to eliminate as candidates for positions as superintendents of schools in unions many persons who do not possess the qualifications in ability, in academic equipment, in professional training and in experience necessary for the successful performance of duties usually devolving upon a superintendent of schools.

3. The Board of Education, in administering the above law, grants certificates either on examination or on credentials. Examinations are held twice a year, in July and in December. In addition, the Board may require, through its agents, inspection of the work of an applicant by visits to the schools under his charge.

Candidates for certification on credentials are required to furnish evidence with regard to academic preparation, experience, professional study and such further evidence as the Board of Education may require as to personal and professional qualifications for the office of superintendent of schools.

4. There would be no difficulty in extending the administration of the certification of superintendents of schools to the

entire State, inasmuch as the number of positions to be filled each year is not great. Candidates would, in many cases, probably be certificated on credentials.

VIII. PROPOSED ACT RELATIVE TO ALL EDUCATIONAL INSTITUTIONS WHICH RECEIVE FINANCIAL AID FROM THE TREASURY OF THE COMMONWEALTH IN THE SHAPE OF ANNUAL GRANTS OR OTHERWISE.

Be it enacted, etc., as follows:

SECTION 1. The board of education is hereby authorized and directed to make annually to the general court, and at such other time as it may deem necessary, a report relative to all educational institutions which receive financial aid from the treasury of the commonwealth in the shape of annual grants or otherwise. Such reports shall contain expressions of opinion and recommendations by the board of education as to the necessity and desirability of any special and general appropriation requested from the general court for the use of such institutions; and shall also contain such other facts and recommendations as the board of education may deem advisable and fitting, with a view to developing and promoting general educational policies and efficiency and economy in expenditures pertaining to the various types of education aided by the commonwealth.

SECTION 2. In order that the board of education may make proper examinations and prepare reports, said board or its agents are hereby authorized and directed to inspect and examine from time to time the institutions mentioned in section one of this act, and to secure from these institutions such information as is deemed necessary, by examination of courses of study, methods of purchase, supplies, plans, books, papers, accounts, buildings, land, etc., and any and all other matters which the state board of education, its agent or agents, may deem advisable.

SECTION 3. To assist the board of education in carrying out the provisions of this act, it may employ such person or persons as it may deem necessary and expedient, and for this purpose may expend a sum not exceeding five thousand dollars per annum.

SECTION 4. All reports rendered in accordance with this act shall be submitted to the governor and council, the legislature, the commission on economy and efficiency, and to each institution upon which report is made.

SECTION 5. This act shall take effect upon its passage.

Explanatory Notes.

1. This bill is identical with one submitted by the Commission on Economy and Efficiency to the Legislature of 1913 (House, No. 2153), with recommendations.

2. It also substantially agrees with one proposed by the Board of Education in a report (House Document No. 2) submitted to the Legislature of 1912 in response to a resolve from the Legislature of 1911 directing the Board to make recommendations as to State supervision of educational institutions receiving aid from the treasury of the Commonwealth.

3. It also corresponds in its essential features with a bill proposed by the Board relative to State supervision of textile schools, accompanying a report made in 1913 by the Board of Education to the Legislature (House, No. 2214), at the request of the Legislature of 1912.

4. The State appropriated to institutions for educational purposes in 1915 the following amounts: —

Massachusetts Agricultural College,	\$306,800
Massachusetts Nautical School,	68,000
Massachusetts Institute of Technology,	100,000
Worcester Polytechnic Institute,	50,000
Bradford Durfee Textile School, Fall River,	24,000
Lowell Textile School,	65,780
New Bedford Textile School,	27,000
Education of the Deaf, Dumb and Blind: —	

- | | |
|---|---------|
| (a) Perkins Institution and Massachusetts School for the
Blind, | 30,000 |
| (b) New England School for Deaf Mutes, | 3,500 |
| (c) For other purposes classified by the State Auditor as
education of defectives, | 200,000 |

IX. PROPOSED ACT TO PROVIDE FOR THE MAINTENANCE OF TRAINING SCHOOLS FOR STATE NORMAL SCHOOLS.

Be it enacted, etc., as follows:

SECTION 1. The words "training school," as used in this act, shall mean any model school, practice school, or training school used by a state normal school for the purpose of providing facilities for observation and practice teaching for students in such normal school.

SECTION 2. The board of education is hereby authorized to contract with any town or city in or near which a state normal school is located, for the maintenance jointly by said town or city and the commonwealth of training schools for the use of such state normal school. Any amounts paid by said town or city toward the maintenance of such training schools shall semi-annually be deposited with the treasurer and receiver general of the commonwealth to the credit of the normal school in connection with which the training school is maintained.

SECTION 3. Any contract made under the provisions of section two of this act shall provide that the payment by said city or town towards the maintenance of said training schools shall not be less for any fiscal year than the product of the average membership in said training schools for the preceding school year, by the per capita expenditure for school support for each pupil in average membership in the elementary schools of said city or town, not including the training school.

SECTION 4. The board of education is hereby authorized, on behalf of the commonwealth, to enter into a contract with any town or city in or near which a state normal school is located, whereby the commonwealth and said city or town may, when sufficient appropriations for this purpose are available, share in the cost of the erection and equipment of buildings to be used for training schools.

SECTION 5. Any contract made under the provisions of sections two and three of this act shall be terminable by either party on two years' notice, or after one year on the agreement of both parties.

SECTION 6. The board of education, within thirty days after the passage of this act, shall give notification as to its provisions to any city or town to which the act applies; and in the event that any existing contract between the commonwealth and the said city or town does not now conform to the provisions of this act, the board shall give due notice to said city or town of the date of proposed abrogation of the existing contract by the commonwealth.

SECTION 7. This act shall take effect on its passage.

Explanatory Notes.

The arrangements now existing between the State and several of the municipalities in which normal schools are maintained are disadvantageous to the Commonwealth. The report of the Commission on Economy and Efficiency, submitted Dec. 31, 1914, emphatically condemned these existing arrangements, and strongly recommended that the Board proceed at once to have existing contracts rewritten.

The Board has had under consideration for several years the matter of a revision of contracts with Westfield and Framingham. It is exceedingly difficult to procure a rewriting of a contract for the maintenance of practice schools which may involve considerable additions to the financial outlay on the part of the town. The solicitor for Framingham has also raised the entire question of the authority of the Board to enter into such contracts.

In order to obviate local difficulties in the way of getting proper contracts written, the Board recommends that legisla-

tion be enacted giving the Board authority to make contracts which shall be fair to both the State and the local community. The Board should also be authorized to enter into arrangements with towns for the erection of training school buildings.

X. PROPOSED RESOLVE TO PROVIDE FOR BUILDING AND FURNISHING A DORMITORY, FOR A NEW LAUNDRY BUILDING, AND FOR CERTAIN OTHER IMPROVEMENTS AT THE STATE NORMAL SCHOOL AT FRAMINGHAM.

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding seventy-two thousand two hundred and forty-five dollars, sixty thousand dollars of which shall be expended, under the direction of the board of education, for building, equipping and furnishing a dormitory, and twelve thousand two hundred and forty-five dollars for building and equipping a new laundry, and for certain other improvements at the state normal school at Framingham.

XI. PROPOSED RESOLVE FOR BUILDING AND FURNISHING A NEW DORMITORY, KITCHEN AND REFECTORY AT THE STATE NORMAL SCHOOL AT BRIDGEWATER.

Resolved, That there be allowed and paid out of the treasury of the commonwealth a sum not exceeding two hundred and thirty-seven thousand dollars, of which amount eighty-eight thousand dollars shall be available in nineteen hundred and sixteen, and one hundred and forty-nine thousand dollars in nineteen hundred and seventeen, to be expended under the direction of the board of education, for erecting and furnishing a new building, containing a dormitory, kitchen and refectory, for an extension boiler house, removing engines and generators, and for certain other improvements at the state normal school at Bridgewater.

PART II.

REVIEW OF REPORTS OF AGENTS OF THE
BOARD AND NORMAL SCHOOL
PRINCIPALS.

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REVIEW OF REPORTS OF AGENTS OF THE BOARD AND NORMAL SCHOOL PRINCIPALS.

The commissioner, for the Board of Education, receives reports annually from deputy commissioners, agents and the principals and faculties of the normal schools. The commissioner emphasizes the importance of constructive thinking and planning on the part of the officers of the Board and normal school principals for the reason that all forms of public education are now obviously in a state of transition as regards fundamental aims and methods. Teachers and laymen associated with the public school service of Massachusetts depend, in constantly increasing measure, on officials of the Board for guidance. It is intended that each of the officials mentioned shall have under constant consideration the problems which in his special field require constructive thinking and investigation, to the end that when solutions or conclusions have been reached the definite promotion of proposals based thereon may, with the approval of the Board, be begun. Each deputy commissioner, agent, and normal school principal, therefore, submits an annual report to the commissioner, reviewing the year's work and discussing definite proposals and recommendations affecting his department. Some of the more interesting and suggestive of the discussions found in the current reports of these officials are here reviewed.

DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION.

The Department of Elementary and Secondary Education administers the certification of superintendents of unions and of teachers in State-aided high schools. It also manages the Bureau for the registration of teachers. It formulates and applies standards for the approval of high schools as required by

the provisions of chapter 556 of the Acts of 1914. With these exceptions the functions of this department are chiefly advisory in character. The reports of the deputy commissioner and agents consist, therefore, largely of recommendations addressed to public school authorities throughout the Commonwealth.

REORGANIZATION OF ELEMENTARY EDUCATION IN UPPER GRADES.

There is a general demand for changes in present practices as to courses of study, methods of instruction, and grouping of school children from twelve to fourteen years of age. The agents of the Board have, as a consequence, urged upon superintendents of schools in Massachusetts the importance of considering the possibility of a general reorganization of the work of the upper grades in elementary schools. A number of States have already taken definite steps in this direction.

Mr. Orr, who has been investigating the problems involved, finds that existing courses of instruction for children of twelve to fourteen years of age do not appear to arouse the interest and enthusiasm that are shown in the earlier years of the pupils' school life. The progress made by pupils in advanced reading, writing, English expression and arithmetic is often halting and unsatisfactory. Aims and purposes in upper-grade instruction are not clearly defined. There is frequently an excessive amount of routine drill with undue emphasis on verbal memorization.

Various plans of readjustment are now being tried throughout the country. The plan which seems best adapted to conditions in Massachusetts would involve the separate organization of local elementary schools of the lower six grades, and the establishment of central intermediate schools for all pupils over twelve who are not ready for the high school. In these central schools flexible courses of instruction should be provided, and departmental teaching should be the rule. No readjustment of the regular four-year high school course would be required.

Propositions relative to the proposed type of intermediate school have been discussed with various groups of school officials by Mr. Orr. They were also outlined in the seventy-eighth annual report of the Board. A few intermediate schools are

already in operation in Massachusetts. There have not as yet been adequate formulations of the courses of study, methods of housing, organization of teaching force, and methods of instruction that should obtain in the intermediate school. A committee composed of superintendents of schools is now being formed to prepare a manual on the intermediate school. This manual is designed to present findings and recommendations as to the following problems of the intermediate school: —

- (a) *Program of Instruction.* — Under this head will be considered the program of study in the main, the number of hours' session each day, the time allotted to each subject, the methods and aims of each subject, the selection of common and variable factors, the relation to work in grades 1 to 6, the relation to high school, and methods of promotion.
- (b) Conditions of admission.
- (c) Provision of special opportunities for exceptional groups of children, as the so-called —
 - (1) "Literary-minded" group.
 - (2) "Working certificate" group.
 - (3) "Motor or concrete-minded" group.
 - (4) Subnormal or retarded group.
- (d) Methods of housing, including types of buildings and equipment.
- (e) Provision for supervised play and recreation.
- (f) Transportation of pupils.

An important work of this committee will be to indicate the procedure to be followed in establishing and maintaining intermediate schools in the various communities in Massachusetts, and to estimate the probable cost of proposed changes.

STATE ADVISORY COURSES OF STUDY FOR GRADES 7 AND 8.

In addition to the courses of study for grades 1 to 6 of the elementary schools, a preliminary report upon which has been made, committees of superintendents of schools are to prepare, under the direction of Mr. Orr, reports on an advisory course of study for use in grades 7 and 8.

The purpose in preparing such a course of study is to formulate standards that schools may reasonably be expected to maintain in the several subjects taught children from twelve to fourteen years of age.

Such standards are to be based on the capacities and needs of children of these ages. In general, the pupil on reaching the seventh grade should have completed work as outlined in the course of study for grades 1 to 6. It is to be recognized, however, that the gain in intellectual power and capacity which comes through natural growth independent of formal instruction must be considered in preparing a course of study. The standard of attainment and character of the work must also be adjusted to the capacities of children of these ages, as determined by physiological and psychological conditions.

The needs of children from twelve to fourteen years of age arise on the part of the individual, from the natural desire for self-expression, and the desire for information and knowledge (intellectual curiosity), and also from the growing complexity in social relations. Some of the needs due to the latter cause are common to all children, while others are peculiar to particular groups, namely, those likely to leave school at the age of fourteen; those who are likely to finish the general high school course; and those who intend to take the commercial or other practical courses in the high school or industrial schools.

In preparing the course of study for grades 7 and 8, the principles that govern the committee on courses for grades 1 to 6, as stated on page 158 of this report, will apply.

In preparing the advisory course of study the committee is expected to formulate as explicitly as possible the aims to control in the teaching of each subject. These aims are to be stated in terms of the information to be gained, the development of interests and outlook of the pupils, as well as in skill in particular processes. Other factors to be taken into account are the kind and character of the mental interests, as well as the physical health and well-being, of pupils of ages twelve to fourteen.

The committee on courses for grades 7 and 8 will make preliminary reports on each subject, and these will be submitted for criticism and suggestion, if possible, at the time of the conference of superintendents of schools, about July 1.

EDUCATIONAL STATISTICS.

Deputy Commissioner Orr discusses in his report certain problems of the statistical reports made by the Board. The law imposes upon the Board the collecting and reporting of statistics in regard to public education. The value of the statistical data thus collected is not always clear. A part of the data serves as a historical record, and a part is used by local school authorities as a means of interpreting school conditions. The present school census should be superseded by registration of all minors above five years of age, and legislation to this end is recommended. A plan of co-operation between the Board of Education and the United States Bureau of Education in collecting certain statistics is discussed.

It is desirable that special statistical studies should be made from time to time. These should deal with particular phases of school instruction and administration, such as cost of intermediate schools, relative cost of eight and nine grade systems, condition of school buildings, and retardation. After the plan of investigation has been worked out and the results to be secured thereby formulated the office of the Board is to prepare the forms. If notice is given in advance of such an investigation, then each superintendent of schools can, on the forms prepared by the Board, secure the data in a particular field for publication in his annual report. All that would then be necessary would be that a transcript of this report should be sent to the Board of Education for compilation, tabulation and interpretation.

GENERAL SCIENCE, A NEW HIGH SCHOOL SUBJECT.

One of the most important and difficult problems of contemporary secondary education is in developing new subjects of instruction when it is found that the cultural, social or vocational needs of pupils render this desirable. A subject of this character now in process of being organized is called "general science." The aims which should control in general science instruction must differ greatly from those now held in the teaching of special sciences in high schools. Appreciation of the scope and character of scientific knowledge and method as now

available, insight into the possibilities of using such knowledge and method in comprehending and controlling the conditions of the material and social environment, and intellectual enthusiasm for the more extensive grasp of scientific principles, — these must be some of the results aimed at.

Deputy Commissioner William Orr, who has been giving attention to this subject for several years, notes in his report the prevailing and general dissatisfaction with results from science teaching in high schools as now carried on. This dissatisfaction finds expression in criticisms from educational leaders and from the public. It is a fact that the number of pupils pursuing courses in science in the high schools does not increase proportionately with the total enrollment.

Mr. Orr says, in substance, that many teachers have begun to question seriously whether there are not more effective ways of bringing boys and girls aged fourteen to sixteen into an intimate and sympathetic understanding of the world of nature. Many experiments to this end are now being made. Some of these may be expected to be futile and to bring discredit on the whole subject because they are being conducted with an imperfect understanding of the actual problems and conditions involved. In other instances, even though the experimenter may not have wholly clear conceptions of his aims, nevertheless the conduct of his classroom work has improved, and finer interests on the part of pupils have been secured because of a new spirit in his school.

General science is now making a definite appeal to educators, but the practices followed in organizing and teaching this subject are as yet endlessly varied. There is often still an absolute dependence upon text-books. Definite aims or purposes are frequently lacking. Again, while at the outset the teacher foregoes traditional methods, in practice he reverts frequently to routine modes of topical presentation. Therefore a full and detailed definition of general science as a school subject, including a statement of aims, organization of materials, and methods of instruction, should be formulated in the near future.

The following propositions are submitted: —

I. The aims of instruction in general science as adapted to first or second year high school boys and girls should be —

(a) To establish many points of contact between the pupil and his physical environment.

(b) To multiply his interests in the phenomena and interpretations of science.

(c) To inculcate respect for, and intelligent appreciation of, expert scientific knowledge and skill in the service of man.

(d) To develop interest in and capacity for the maintenance of individual and community physical well-being.

II. The knowledge acquired in a course in general science may be considered under two heads:—

(a) Information on many and varied topics, in regard to most of which the pupil is expected to acquire only superficial and fragmentary knowledge through extensive rather than through intensive reading, study, and observation.

(b) Precise and exact knowledge of some facts, processes and principles essential to a right understanding of certain projects or special studies made by individual pupils or groups of pupils.

Most of the material which should be included in a general science course would be found under the first head.

III. The material of general science cannot be organized in a formal course of study. The teacher should, in co-operation with his pupils, prepare a list of projects, topics, and exercises to be used. Naturally, many of these projects, topics, and exercises will relate to objects of interest in the immediate environment of the school, and to matters in the field of science that are claiming popular attention.

The teacher is to select from this list of material those exercises, projects and topics which are most available for class use. It may be taken for granted that the study, reading and observation connected with these topics will give the pupils a broad, general view of science, most interesting and important to them at the present day in relation to their environment.

IV. The following are suggestions to guide in selecting material to be studied either as projects, topics or exercises:—

(a) The teacher of general science should utilize in large measure the unorganized information which pupils bring to the classroom.

(b) Pupils may be induced to read articles in popular magazines or newspapers bearing upon some topic.

(c) Projects may be based upon mechanical devices; and appliances should be constructed and explained by the pupil.

(d) Investigations may be made of earth formations and processes, as erosion, deposits and the action of water.

(e) In other cases the pupils may be asked to construct useful articles, involving the application of scientific principles.

(f) Another valuable line of study consists in gathering material from various sources and presenting the significant data in charts and diagrams.

It seems advisable, in view of the many problems regarding the teaching of general science calling for solution, that a committee should be organized to co-operate in securing and assembling information as to existing practices in teaching this subject, and to present the results in a manual.

PROPOSALS OF AGENT FOR SECONDARY EDUCATION.

For the past three years C. D. Kingsley, agent for secondary education, has been considering measures necessary for the improvement of high schools. In co-operation with several Massachusetts teachers and two specialists from other States he has prepared a manual on the teaching of community civics. He is at work upon manuals for teachers of commercial subjects, and of household arts, in co-operation with the special faculties in charge of these subjects in the Salem and Framingham Normal schools. He has for several years been chairman of a national commission on the reorganization of secondary education, which comprises in its membership a large number of the most progressive secondary school men and women in the country.

Mr. Kingsley has outlined the following program for the effective improvement of instruction in Massachusetts high schools:—

1. Preparation of manuals, additional to those now in course of preparation, on the teaching of high school subjects.
2. An annual institute for high school teachers, lasting several days.
3. Systematic training of high school teachers in service.
4. Extended and thorough preliminary training of high school teachers, either in existing institutions or in a school maintained by the State especially for this purpose.

In order to realize the above program, the following facilities should be provided: —

1. The establishment of a system of certifying high school teachers.
2. The provision of better facilities for training these teachers.
3. Special agents for secondary education.
4. Additional State aid for high schools.

Mr. Kingsley calls attention to the need of financial aid from the State if effective high school education is to be furnished in the poorer towns and cities of the Commonwealth. He has presented a plan whereby towns having fewer than 500 families and now receiving from the State \$500 annually may receive a grant more nearly proportional to the needs of the communities maintaining these schools. He is of the opinion that in time it may prove expedient to grant special State subsidies for the more costly features of high school work, as manual training and household arts, and perhaps also definite increments to the salaries of high school principals, who will remain longer in their respective communities, thus insuring continuity of policy in small high schools.

HIGH SCHOOL MANUALS.

On the preparation of manuals on the teaching of high school subjects, Mr. Kingsley says, in substance: —

It is essential to efficient work in any high school, large or small, that the teacher shall have a clear conception of the results to be secured in each subject, and of the means by which such results can best be attained. The principal and superintendent should know the goals which the teacher is to have in mind, and the means which he should be expected to use in reaching them. In schools where changes of teachers are frequent the new teacher should know what his predecessor has done. In schools where there are several teachers in one department team work is impossible without agreement on aims and methods. Moreover, if secondary education is to become scientific in its procedure, the distinctive aims and methods for each subject must frequently be discussed and revised. Consequently, the best practice and opinion relating to the aims, methods and content should be made accessible to all the teachers of the State through teachers' manuals.

Each manual should contain —

(a) A statement of aims in the teaching of that subject. Because wide differences of opinion exist regarding the objectives in nearly every high school subject, the majority of teachers are disposed to follow the traditional conceptions. Therefore State authorities should examine new statements of purposes, and when these are found valid, endorse them. When traditional aims are still tenable their restatement in precise terms will give teachers greater confidence in their work.

(b) A description of methods. Since methods effective for a subject taught with one end in view may be futile and harmful when the aims are changed, new methods should be presented and illustrated by numerous specific examples. In subjects and topics in which the traditional aims still hold good, a description of approved methods would be helpful to many teachers.

(c) A statement of the content of the subject under consideration, with detailed suggestions as to specific values and special methods for various topics. This statement should indicate which topics are of greatest value. In such subjects as civics, general science and literature, it is especially important that the specific value of various topics, experiments and selections should be explained.

(d) Methods of measuring results in teaching. A redefinition of aims involves new methods of measuring results. The manual should show both the values and the limitations of traditional methods of measurement, and suggest new methods.

HIGH SCHOOL TEACHERS' INSTITUTE.

Mr. Kingsley also recommends the establishment of an annual institute for high school teachers as a means of securing immediate improvement in instruction. This should be held during the last week in August. Courses on the teaching of various high school subjects, each in charge of a specialist, would be offered. The instructors should be required to submit in advance outlines or briefs of the work they intend to present, including references to required reading. These documents, after approval, would be printed and distributed to teachers planning to attend the conference, so that problems

to be discussed could be studied in advance. School committees should certainly reimburse teachers for expenses incurred in attending the institute, and might well also pay an extra week's salary. Contracts with teachers might include the requirement of attendance at this institute.

SPECIAL AGENTS FOR HIGH SCHOOLS.

Mr. Kingsley favors the employment of special State agents to supervise the teaching of high school subjects, such, for example, as natural science. He holds that this service is essential to satisfactory training of high school teachers in service. The New York State department of education has for several years employed State directors in modern language, English and drawing, and now proposes to designate its other agents as "specialists" rather than "inspectors," as heretofore. Each specialist would (*a*) visit teachers in their classrooms and give individual assistance; (*b*) confer with groups of teachers on common problems; (*c*) issue bulletins on the results of successful experimentation, with references to useful material; and (*d*) revise, from time to time, the teachers' manual on that subject.

Such agents would be especially helpful to teachers in smaller high schools, who are usually young and who have few opportunities for conferences with other teachers. They would also be valuable counsellors to teachers in larger high schools. The reasons for this proposal may be thus summarized: —

1. Many teachers now in service will continue for years as high school teachers. They need help in fitting their work to the needs of the present. They would welcome the leadership of persons who are masters of the details, as well as of the general theory, of their special subjects.

2. Young teachers, even with the best possible preliminary preparation, profit by training in service. No novice can fully comprehend the problems and difficulties of his subject until he has taught two or three years.

3. Even if all teachers, young and old, were now well versed in the best thought of the present in their own fields, they need leaders to guide them in keeping abreast of new developments.

THE PROFESSIONAL TRAINING OF HIGH SCHOOL TEACHERS.

Experience in certificating high school teachers shows that many candidates have specialized so narrowly that they do not have a broad outlook upon the subjects that they desire to teach, and that they have not made a definite study of the aims, methods and content that should prevail in the teaching of those subjects. Mr. Kingsley believes that the best results can be accomplished if the prospective teacher is thoroughly trained to teach two major subjects, or else to teach one major and two minor subjects.

A complete program of professional training should include (a) educational theory and practice; (b) problems of secondary education, such as high school organization, supervision of social activities in the school and vocational guidance; (c) courses in teaching the major and minor subjects, with special reference to the aims, methods and content adapted to each year of the high school course; (d) observation in a model high school; and (e) practice teaching under supervision.

A few colleges are now developing programs of professional training of the scope here contemplated. Mr. Kingsley believes that it will be necessary, in any adequate scheme of professional training of high school teachers, that specialists who give courses in the teaching of individual subjects shall themselves have been high school teachers. Under an ideal scheme it might be provided that persons properly equipped should serve alternately as State directors of special subjects, and as instructors in the teaching of these subjects in the training school. Whether the training of secondary school teachers is ultimately to be done by the existing colleges or in a professional school conducted by the State, there should, in any case, be the closest co-operation between the State directors and the instructors in the training schools.

PRESENT PRACTICES IN RURAL SCHOOL ADMINISTRATION.

The improvement of elementary education in rural schools through better administrative methods is one of the chief topics in the report of Agent F. G. Wadsworth.

He notes the growth in effectiveness in the administration of

schools in Massachusetts promoted by insistence on business management of public affairs, and by the influence of men of modern business training and experience serving on school committees. In many instances, however, the schools suffer when responsibility is not centralized in the proper authorities, and consequently misunderstandings and even conflicts occur among administrative officials. The following instances are cited as examples of varying practices: —

Town A. — The school committee meets once a month. The superintendent of schools attends these meetings on rare occasions, and then only by special invitation of the committee. The school committee —

1. Prepares an annual budget.
2. Makes provisions for repairs to school property.
3. Selects and purchases text-books, supplies, equipment, and apparatus.
4. Employs teachers, assigns them to schools, and determines the salary schedule.
5. Decides special cases of discipline without reference to the superintendent of schools.

Individual members without special authority perform executive duties, *i.e.*, order changes in courses of study, direct teachers on methods of instruction, and decide cases of discipline.

The superintendent of schools is in effect merely a clerk for the school committee. He visits schools, delivers text-books and supplies to teachers, issues employment certificates, and answers general correspondence. Occasionally the school committee asks the superintendent to select teachers to fill vacancies, but otherwise teachers recommended by him are seldom elected.

Town B. — The school committee has no regular dates for meeting. Its meetings rarely exceed two each year. All school business is transacted by conference between the superintendent of schools and individual members of the committee, by telephone, at home, on the street, or wherever opportunity offers. The school committee wishes to be relieved as far as possible of consideration of problems of school administration. The committee is interested chiefly in fixing the amount of the annual budget. The superintendent —

1. Submits estimates of the financial needs of the schools, which are used as a basis for the annual budget.

2. Acts as secretary of the school committee and keeps all school records and accounts; receives and approves all bills for purchases; sends out notifications to school committee members of meetings and propositions to be considered at the meetings; and keeps records of meetings and votes of the school committee.

3. Supervises repairs and improvements to school property within the appropriations for such purposes.

4. Appoints and assigns all teachers, with the approval of the school committee.

5. Selects and purchases text-books, supplies, equipment, and apparatus within the appropriations for such purposes.

6. Decides special cases of discipline without reference to the school committee.

7. Visits schools and gives instructions to teachers without interference by members of the committee.

8. Prepares courses of study and directs the administration of the same.

9. Attends school committee meetings when they are held, and has a voice in the discussion of all subjects considered.

Town C. — The school committee holds meetings at the call of the chairman. These meetings are held at irregular intervals. The superintendent is generally present and has a voice in the discussions. The committee co-operates with the superintendent in some measures, while in others it acts without reference to him, as, for example —

1. In making the annual budget the school committee consults the superintendent about many items.

2. A member of the school committee is delegated to keep the books of the school department.

3. Supervision of repairs to school property is delegated to individual members of the school committee, each member being in charge of certain buildings in the district in which he lives.

4. Text-books and supplies are purchased by a member of the school committee. The superintendent is required to make requisition for books he desires.

5. Teachers are employed by the committee without consulting the superintendent of schools.

6. In special cases of discipline the school committee often consults with the superintendent of schools, but individual members of the school committee at times decide special cases of discipline without reference to the superintendent or without consulting the teacher.

7. The school committee sometimes passes votes approving certain methods of instruction, even though the methods do not have the superintendent's approval.

By comparing the procedure in the administration of schools in towns A, B and C it appears that in Town A the school committee exercises executive as well as legislative powers and duties, the superintendent being to all practical purposes disregarded.

In Town B, on the contrary, the school committee intrusts all duties and powers to the superintendent of schools, and neglects its own responsibilities. Conditions in Town B are as unsatisfactory as in Town A. These are, of course, extreme cases in administrative procedure. The school committee of Town A administers the schools without making right use of the superintendent's office, and the school committee of Town B places administrative powers and duties upon the superintendent and does not recognize its own responsibility.

Town C illustrates a not uncommon condition, where the functions of the school committee and the superintendent of schools are poorly defined, the school committee reserving certain duties which rightly belong to the salaried executive of the committee, the superintendent of schools, and delegating to him some powers and duties which they should retain. Conditions in Town C lead to a divided responsibility, so that neither school committee nor superintendent can be held responsible for successes or failures in the school system.

When trouble arises in a town where responsibility is not centralized, the superintendent of schools is often made the scapegoat, as he is the only appointed officer upon whom blame can be placed. The administration of schools in Towns A, B and C in no case conforms to sound principles of school administration or business practice, and efforts to bring about an improvement in administrative procedure in such towns should be encouraged and supported.

IMPROVEMENT OF SCHOOL ADMINISTRATION.

In view of the above conditions, efforts were made during the past year to interest school officials throughout the State in the establishment of school administrative procedure upon sound principles. A series of one-day conferences was held with superintendents of schools in the fall of 1914, at the several State normal schools. A one-week conference with superintendents of schools was also held at Cambridge, June 28, to

July 3, 1915. At these conferences the duties and powers of the superintendents of schools were discussed. In the spring of 1915 a series of fifteen conferences with school committee members was conducted in various parts of the State. Representatives of school committees of 71 per cent. of the towns of the State were in attendance. At these conferences representatives of the Board of Education presented ways and means for improving the administration of schools.

The topics and general propositions discussed at these conferences are summarized below: —

(a) The efficient conduct of the public schools requires that—

1. Definite administrative responsibilities should be assigned to the school committee as a whole, and to the superintendent, —

(a) By defining the functions of the school committee as a legislative and deliberative body.

(b) By defining the functions of the superintendent of schools as an executive.

(c) By determining the responsibilities and relationship between superintendent and school committee.

2. Sound methods of administrative procedure should be established —

(a) In the business department of the schools.

(b) In the educational department of the schools.

(b) The school committee is charged with final responsibility for passing upon suggestions and recommendations made for the improvement of the schools. As such it is an essentially legislative body and should center its activities in —

1. Deciding as to general educational policies of the town.

2. Defining the duties, powers, and responsibilities of superintendents of schools, teachers, and other school officers.

3. Determining methods of procedure in —

(a) Making the annual budget.

(b) Selecting and purchasing text-books and supplies, equipment, and apparatus.

(c) Keeping school records and accounts.

(d) Employing and assigning teachers.

(e) Employing janitors, school physicians and nurses.

(f) Developing courses of study.

(g) Conveying of pupils.

(h) Deciding special cases of discipline.

(c) A sound educational policy for any town must be based largely upon an understanding of local conditions. It is the duty of the school committee to discover the kind of education which will function most effectively within the community. For example, in a farming community the educational policy may well provide opportunities for children to become acquainted with modern farm methods, household arts, and kindred subjects. The committee should consider how the best interest of the community would be served if, in addition, courses in commercial and technical subjects were offered. It may also ascertain what part of the high school work shall be devoted to purely cultural subjects, and what parts to commercial, agricultural, and industrial subjects. The school committee, having decided on the kinds of education to be offered, will adopt plans and proposals for developing the required means of instruction.

As part of a general policy the school committee may properly rule that no teacher shall be employed who has not had at least a normal school training; that no teacher who is a resident of the town shall be employed in the schools without at least a normal school training and one year's experience in some other community; and that no teacher shall be employed who is not recommended by the school superintendent.

In business matters the school committee may require that all supplies shall be purchased on the basis of competitive bids, and also determine the manner of awarding contracts.

(d) Legally the superintendent of schools is the executive officer of the school committee, but the law is general and may be given various specific interpretations. School committees should therefore define clearly the powers and duties of the superintendent of schools and hold him responsible for results. The superintendent of schools should have the training, experience, opportunity and time required to secure information bearing upon problems of educational administration, and should therefore have large responsibilities placed upon him. He should be required to make frequent reports to the committee on the conditions and needs of the schools; he should present in written form, for the consideration of the school committee, recommendations as to policies, including programs for

the improvement of the schools, on approval of which by the school committee he should be given authority and means sufficient to produce results. He should be intrusted with the discharge of all plans for the improvement of the schools, and should be regarded as the active executive head of the schools, members of the school committee as individuals having no specific executive authority. In regular meeting, of course, the committee has all authority, subject to its own rules, to determine the methods of procedure to be followed by the superintendent.

The recommendations made in the conferences were that the powers and duties to be definitely delegated to the superintendent of schools by the rules of the school committee should include the following: —

1. A periodical physical survey of, and written report on, the school plant as affecting —

- (a) Health protection.
- (b) Fire protection.
- (c) Accommodation of pupils.
- (d) Expense of up-keep.

2. The keeping of school accounts and school records as secretary of the school committee, including responsibility for records of school committee meetings and correspondence.

3. The selection of teachers, subject to the approval of the school committee.

4. The selection, with the assistance of his teachers, of text-books and supplies, to be purchased under his direction, with the approval of the school committee.

5. The making of minor repairs on school buildings, and reporting to the school committee necessary larger repairs, the superintendent to be consulted on all repairs to school property.

6. Passing upon plans for school buildings.

7. Making recommendations on the selection of janitors, school physicians and nurses.

8. The direction of all service employed by the school committee.

9. Passing upon special cases of discipline.

10. Preparing contracts for the transportation of pupils.

(e) The school committee should adopt rules and regulations defining the duties and powers of teachers, janitors, school physicians, and nurses. In every instance these officers should be responsible to the superintendent of schools, and the superin-

tendent should be required to make frequent reports as to the qualifications of these officers for the positions which they hold, and should be given definite authority in directing their work.

In the rules and regulations adopted by the school committee methods of procedure in the following matters should be prescribed: —

1. *Estimates and Accounting.* — The time and manner of preparing the annual budget; the monthly date on which bills should be presented for payment; the method of making requisition for supplies and equipment; the checking of supplies on hand and received.

2. *Awarding of Contracts.* — The school committee should indicate that all bids for contracts are to be submitted to the secretary of the school committee, and to be presented by him at a regular or special meeting of the full committee for consideration.

3. *Transportation Routes.* — The school committee should define its position in regard to the transportation of children and should establish conveyance zones, or indicate factors determining whether a child shall be conveyed or not, as, for example, distance from the school, age and physical condition of the child, and condition of the roads and surrounding country.

4. *School Discipline.* — Parents should be informed that in cases of discipline the order of procedure is to refer the matter directly to the teacher. When satisfaction cannot be obtained from the teacher, the case should be referred to the principal of the building, then to the superintendent of schools, and if these officers fail to settle the case, and the parent is still aggrieved, the matter may be brought to the attention of the school committee at a regular meeting. All complaints presented to the school committee should be in writing.

As far as practicable, procedures should be firmly established, so as to avoid complications and embarrassments in the administration of the schools.

RURAL SCHOOL BUILDINGS.

A portion of Mr. Wadsworth's report is devoted to the condition of school buildings in rural towns. Nearly 100 of these towns were visited during the school year, 1914-15, and the physical conditions of all school buildings inspected. Since the law vests no authority in the Board of Education as to improvement of school property, the only action possible where conditions are faulty is to send to the school authorities a memorandum of the observations made and of recommenda-

tions as to changes in lighting, heating, ventilation, and sanitation. These recommendations have, in most instances, been acted upon favorably by school committees. School officials are found to be not only willing but anxious that their school-houses shall conform to accepted standards of construction. There is, however, no State agency prepared to give information on standards and plans of schoolhouse construction, the cost of buildings, or approved arrangements of rooms for purposes of instruction. As a consequence, errors made for the past fifty years are reappearing in new buildings. Until some expert body is appointed from which school officials may secure desired information, towns will unavoidably continue to erect buildings which do not conform to the best standards of school-house construction.

STATE COURSE OF STUDY.

A report of progress on the provision of a State course of study (for the first six elementary school grades), is made by Mr. Wadsworth. This advisory course is designed primarily to indicate in detail the recommendations of the staff of the Board as to desirable minimum standards for schools in towns of superintendency unions.

In many towns there are no definite courses of study. In others, courses of study are in use which are of questionable value because based on inadequate local standards. Courses in some towns involve excessively high grading (*i.e.*, studies and topics too difficult for the pupils are assigned), while in others it is unnecessarily low. This lack of a common standard results in waste of time when children are transferred from one town to another. Where no course of study is in use, each teacher instructs children according to her own ideas, often without reference to the work of preceding or succeeding years.

A State course of study for the first six grades, prepared in 1913 by committees of normal school teachers, was of service for a time, but it has been out of print for two years. The course of study now being prepared by committees of superintendents and normal school teachers, is based upon the following principles:—

1. It should indicate the minimum attainments required of the pupil, under usual school conditions, in each subject in

each grade. This minimum should be expressed in terms of skill or proficiency in particular processes, as spelling, penmanship, and arithmetic; in command of facts in some field of study, as geography, history, and science; and in the development of appreciation, interest, and standards of taste, as in literature.

2. Each subject in the course should be allotted a certain value, expressed by the amount of the pupil's time which should be devoted to it per week.

3. The course of study, in addition to minimum attainments, should indicate supplementary attainments in each subject in each grade that may be reasonably expected of the more capable pupils when taught under more favorable conditions.

4. It should consider chiefly the more important needs and capacities of the child of the given grade and should not concern itself with high school requirements.

5. It should be so framed as to encourage each teacher to use her own resources and ingenuity in making modifications for local conditions, or for the needs of particular groups of children. It should assist the teacher through directions as to the use that may be made of local material for illustrative purposes. But care must be taken that the course is not so framed as to lead to a mechanical compliance as to a formula.

6. The use of text-books should be considered in connection with any course of study, but the course will not specifically indicate texts by titles.

Ten committees of superintendents of schools were appointed to prepare a preliminary draft of the new course of study. These committees have worked faithfully and preliminary drafts of courses in each subject have been printed and are now serving as a basis for experimentation in selected schools throughout the State. The committees are watching closely the application of the course in the schools and are gathering material to assist them in revision and further elaboration.

TEACHERS' REGISTRATION BUREAU.

A detailed statement of the service of the Teachers' Registration Bureau is given in Part III., page 259. The increase in the number of registrations and in the number of positions

filled show that the services of the Bureau are appreciated by teachers, and that they are also being utilized in an increasing degree by superintendents of schools and school committees.

Mr. Hamilton, the agent of the Board who supervises the Bureau, presents in his report a general discussion of its operations, future possibilities and needs. The commissioner reproduces in the paragraphs below the substance of certain portions of Mr. Hamilton's report.

The hope of those who urged the enactment of the law establishing a State Teachers' Registration Bureau was that higher professional standards than existed in employing teachers could be established and maintained. To eliminate the undignified and unprofessional competitive "scramble" for positions, and to free poorly paid teachers from the obligation to pay to commercial agencies sums that aggregate thousands of dollars annually, are results worth much effort. When the law establishing the Registration Bureau was enacted there was no general demand for it. The Bureau has had, consequently, to win its way. It has encountered the obstacles and hindrances usual to a new department.

The administration of the Bureau has been conducted with all these considerations in mind. Its function has been co-operation rather than prescription. It has been careful to claim no more than it could perform. It has been cautious, perhaps too cautious, in its methods of procedure. The work has now reached a stage where, if given opportunity to develop adequately, the Bureau can become highly effective in promoting the welfare of both teachers and schools. It can build up a body of information, especially with regard to services rendered by teachers in their respective schools. It can cause such service to be recognized for promotions to more responsible positions. It has a variety of professional contacts with superintendents and school committees. Its efforts can be made to result in better service to the schools in consequence of its complete detachment from commercial interests.

The Bureau has the cordial co-operation of institutions from which young teachers come in largest numbers, viz., the colleges and the State and private normal schools. It has increasing support from employing authorities, superintendents

and school committees. Its greatest need is the co-operation of the public in the way of adequate financial support, to the end that its possibilities may become actualities.

The accommodations of the Bureau are inadequate and unsatisfactory. During the summer, when teachers are employed in large numbers, work is done under conditions that are wasteful of time and energy. Three employees occupy one small office. The only consultation room for the use of superintendents and teachers is an office provided for other employees of the Board. The clerical assistance provided is also inadequate. During the summer of 1915 an additional clerk has been provided, but by this addition the Bureau has taken care only of current business and the vacation of the regular clerk. Much of the work that should have been done during the winter, such as preparing papers to be ready for instant use when called for, was not done, and this lack of preparedness has prevented the Bureau from furnishing information to superintendents quickly enough to operate for the best interests of the enrolled teachers.

A majority of the superintendents in the State are ready to co-operate in the work anticipated by the Legislature. Last year a tabulation was made of the superintendents of schools in the State who had given the Bureau an opportunity to recommend teachers, and of the cities and towns in which teachers had been placed through the efforts of the Bureau. In January, 1914, 70 superintendents in the State had not asked the Bureau to suggest teachers. By November, 1914, only 43 had not. By September, 1915, this number was reduced to 28. The Bureau does not, of course, place every teacher suggested for positions, but it has placed teachers this year in 58 cities and towns, where heretofore it had not placed any.

There are a few towns and cities in the Commonwealth in which the Bureau places no teachers. Some cities have an examination system and a waiting list of eligible candidates. In some communities it has always been customary for the superintendent and committee to receive applications frequently as many as a hundred for one position. It is not uncommon for superintendents to receive nominations from as many as three or even six teachers' agencies.

The practice of the Bureau has been based upon the provision of the law that "it shall be an agency to assist school officials in securing competent teachers at a minimum expense to the teacher."

When the bill establishing the Registration Bureau was before the Legislature it was predicted by an official of the State Board of Education that to do satisfactory work the State must expect to expend not less than \$7,000 per annum on the Bureau. Experience has shown that this is a fair estimate, and the time is rapidly approaching when such an appropriation will be necessary, although nothing like that amount has, up to the present time, been appropriated for this function of the Board.

The Board asks the Legislature of 1916 for an appropriation of approximately \$4,500, sufficient to employ an agent and two clerks for their entire time. The expenses of administration, rent, telephone, telegraph, postage, printing, stationery and travel are defrayed from the general appropriations of the Board. These may be estimated approximately as \$1,500. During the past year not over \$2,400 is properly chargeable to salaries for the Bureau, because of other work performed by its staff. The service has cost the State about \$3,900. Approximately \$1,600 has been received in registration fees, so that the net cost to the State has been about \$2,300. During the fiscal year 1914-15 the Bureau placed teachers in 302 positions, the salaries of which aggregate nearly \$220,000. If these positions had been obtained through commercial agencies, the commissions would have amounted to more than \$10,000.

Procedure in recommending Superintendents of Schools.

From the beginning the staff of the Board had been somewhat puzzled concerning the duties of the Bureau toward people seeking positions as superintendents of schools. Members of the staff were frequently consulted regarding possible candidates for such positions. On the professional side, members of the staff did not believe the Bureau should ever allow itself to be put in the position of seeking to promote the interests of a certain limited number of registered applicants for such positions, to the exclusion of other superintendents who might be

more worthy of appointment or promotion than those who might happen to be registered. Accordingly, the Bureau does not accept registrations from people who desire only superintendency work. As time went on it became evident, however, that those in charge of the Bureau were being consulted more and more regarding candidates for superintendencies, and it became desirable to adopt and announce a policy in dealing with these matters when they arose. After consultation with a number of superintendents and others, the following principles of practice were adopted, and have been adhered to. This statement was circulated in the News Bulletin of April, 1915: —

Inquiries concerning the practice of the staff of the Board in recommending candidates for positions as superintendents of schools are frequently made. Since the establishment of the Teachers' Registration Bureau such inquiries have become so numerous that it has seemed desirable to decide upon a tentative policy, and to adopt a uniform practice, as follows: —

1. The staff of the Board is unanimously of the opinion that any recommendation of candidates for positions as superintendents of schools should be made only in reply to requests from school committees, and in connection with actual or assured vacancies.

2. When any school committee requests information or suggestions regarding eligible candidates for a vacancy in a position as a superintendent of schools from any member of the staff, a list of such candidates as are considered available for the position in question is prepared and sent to the employing committee. In compiling such a list two or more members of the staff act in concurrence.

3. Persons who hold certificates as superintendents of schools in Massachusetts are urged to keep their records in the files of the Board of Education complete to date. These files are often consulted in securing information for committees seeking a superintendent of schools.

4. Any superintendent of schools in Massachusetts who desires for any reason to change his field, and who notifies the staff of the Board of such desire, will be given consideration when requests for assistance in filling vacancies are received. It is suggested that such superintendents file a statement according to the preceding paragraph.

In the light of their present information the members of the staff believe that the practice outlined above tends to promote the professional interests of all parties concerned. No applicant can feel that he has any special claim to the services of the Registration Bureau, but can be assured that he may have, upon request, a professional service such as can be rendered by agents of the Board familiar with his work. In the natural course of events the staff is consulted with increasing frequency regarding possible candi-

dates for superintendencies, and it desires to be of service whenever possible.

It should be noted that this is stated as the working practice at the present time. Discussion and suggestions from superintendents are welcomed, to the end that the best possible arrangements may be established.

Recommendations for Positions Outside the State.

All members of the staff of the Board of Education, including the agent in charge of the Registration Bureau, are frequently asked to recommend teachers, and, less frequently, superintendents of schools, for positions outside Massachusetts. Their familiarity with the work of suitable candidates, the accessibility of the information they have concerning some 1,500 registered teachers, as well as superintendents holding the union superintendency certificate, together with their close relationship to the normal schools of the State, combine to make their services sought by a considerable number of employers of teachers in other States.

For many years superintendents in adjoining and other States have secured through the principals of the normal schools a part of each graduating class. Such superintendents naturally turn to the Registration Bureau as an extension of the service to which they have become accustomed.

Furthermore, Massachusetts, through its public and private educational institutions, is fitting for many types of positions more persons who desire to teach than can be employed in its schools for their first years of teaching. This notably is true of young women who wish to teach in high schools, in kindergartens or in primary schools. There are also more men offering their services as teachers of manual training and practical arts than can find employment in Massachusetts schools.

Because of these conditions a policy for dealing with requests for teachers from employers outside the State has been adopted for the practice of the Bureau. This policy may be summarized as follows:—

1. Inasmuch as the Bureau was established primarily for the benefit of Massachusetts schools, the Bureau does not recommend for positions outside the State registered applicants serving satisfactorily in Massachusetts schools.

2. The Bureau welcomes the opportunity to assist any unemployed registered teacher to secure a position for which he is fitted wherever and whenever opportunity offers.

3. The Bureau registers applicants for positions who are teaching outside the State, and is ready to assist them to promotion whenever and wherever opportunity offers.

4. Any employer of teachers outside of Massachusetts seeking the services of the Bureau, subject only to the limitation in section 1 above, receives the same attention and service as do those in Massachusetts.

Members of the staff sometimes recommend, on request of employing authorities for positions outside the State, particularly when a distinctly professional promotion is offered, persons employed in Massachusetts schools. Such recommendations, however, are in no way a part of the service of the Bureau, but may be made by any member of the staff independently of it, and the fact that a person is or is not registered with the Bureau is given no consideration in these cases.

DEPARTMENT OF VOCATIONAL EDUCATION.

The Department of Vocational Education has more definite administrative responsibilities than has the Department of Elementary and Secondary Education. It must approve or disapprove a large number and variety of schools for the purpose of deciding whether towns and cities maintaining them are to receive financial aid from the State. Hence the Board through this department must necessarily define its standards of approval. This department, too, serves the Board in meeting legal requirements as to promotion of the development of vocational education in Massachusetts.

The staff of this department are required, therefore, to do a large amount of definite constructive work, some of which is discussed in their current reports.

CONTINUATION SCHOOLS.

Deputy Commissioner Small devotes especial attention to continuation schools. The substance of this part of his report is given in the following paragraphs:—

A year's experience in administering compulsory continuation schools authorized under the provisions of chapter 805 of the

Acts of 1913, and established in Boston, has furnished considerable data wherewith to test the theories applied in the establishment of these schools. These theories were fully discussed in the seventy-eighth annual report of the Board of Education.

The functions these schools are intended to perform for the group of minors designated by the law are (1) to give a so-called "general improvement" education; (2) to furnish, through shop experiences and classroom exercises, prevocational training, which is, in effect, vocational guidance; and (3) to give some definite training for industry (trade extension work).

General improvement instruction for pupils in continuation schools in Boston has had important effects. Instruction in civics, personal hygiene, regular school subjects, and opportunities for recreation have been provided in a less formal way than in the regular school.

Vocational guidance of a practical kind is also easily possible in connection with so-called prevocational training, which can be carried on profitably in continuation schools. Shop work and studies related to shop work have furnished much valuable experience in fields closely related to vocations.

Of 1,150 pupils, as to whom data were secured last spring, practically all give evidence that they gained valuable knowledge as to industrial conditions and that they possess greater industrial intelligence as results of continuation school attendance. Many pupils have been directed into better industrial positions. The shops of the schools are useful adjuncts. Rotation of pupils from one shop to another is practiced as originally planned. By continuous discussion of the interests of the pupils and by frequent reassignment of pupils to different classes genuine vocational guidance becomes possible. Two thirds of the pupils assigned to shops remain contentedly and enthusiastically pursuing the kind of work into which their tastes, intuition, judgment, and general information first led them.

The transfer of pupils from one department to another within the school has caused slight interruption in the continuity of their work. Transfers are made only after careful study and on evidence sufficient to decide on the wisdom of

the change. The fear that pupils would seek to change from one course to another for insufficient and ill-founded reasons has not been realized, as there has been thus far a surprisingly small amount of shifting and the reasons therefor are usually good. It is clear that one month is sufficient time to determine whether the work of a shop is suitable or fitting for the pupil. Shifting from one shop to another has involved not more than one third of the pupils in the continuation school and the great majority of these have shifted but once. The second choice has usually proved both advantageous and final. This satisfactory condition of stability is largely due to a device, "the reservoir class," which pupils enter at the outset, and from which definite assignment is made after two or three weeks, during which period a basis for rational choice is secured through the discussion of possibilities and a careful consideration of tastes and interests.

In making assignments from the "reservoir class," the first choice is between a commercial and an industrial calling. This choice once made, the opportunity for definite training in the chosen field is limited only by the resources of the school shops and possibility of satisfactory placement.

It is clear that vocational guidance as a school-directed activity can be made an effective part of prevocational work in continuation schools for the following reasons: the teachers are alive to their opportunities in this field; pupils are vitally interested; and employers are willing to confer and co-operate with both pupils and school officials. This combination of interests affords favorable conditions for vocational guidance.

Few pupils enter the continuation school with either the experience or place in industry which permits of trade extension teaching. Employed minors fourteen to sixteen years of age are not engaged in skilled industries for which extension training of a definitely trade character can be given. Exceptions occur in machine shop work and printing. Twenty-five per cent. of the boys in the machine shops and 40 per cent. of those in printing shops are so employed that it is possible to give them trade extension instruction (real vocational training). Only about 2 per cent. of the membership of the wood-working or electrical courses and of the classes for girls are

employed on work which can be directly supplemented by training in the shops of the continuation school.

Securing jobs for pupils out of work and keeping them off the streets during periods of non-employment have become definite duties of the continuation schools. The law requires that minors from fourteen to sixteen years of age must be either at work or at school. Those residing in Boston, if at work, must attend the continuation school for a minimum of four hours each week. When unemployed such minors are expected to return to the regular schools. Minors who shift their positions a number of times each year would alternate constantly between the continuation school and the regular school. Such a proceeding is advantageous to none of the parties concerned. These ill effects of a rigid interpretation of the law are minimized by permitting minors who lose their jobs to remain in the continuation school a reasonable length of time while hunting for new employment. This shifting group of minors divides naturally into two classes: (1) Those who would be better off in the regular schools, because they leave school and enter employment not as the result of necessity or of capacity in industrial or commercial lines but by reason of temporary conditions by which they have been lured, driven, or coaxed into wage-earning occupations; (2) those who leave school and go to work for good and sufficient reasons and who are fitted for, and will probably follow, commercial or industrial work for a lifetime.

The attitude of the director of the continuation school toward members of the first group should be quite different from his attitude toward the members of the second group. The first group should be urged to re-enter the regular schools in view of their tastes, capacities, and possibilities, as they, for a time at least, will profit more by the work in such schools than by that of the continuation schools. As the continuation school offers a real and definite service to the members of the second group such minors should attend the continuation school during the periods of employment four hours a week as prescribed by law and when out of employment, at least twenty-four hours per week.

The continuation school has had a good influence on the at-

tendance of children on the regular schools and on the tendency of those out of employment to return to school. Formerly many children between fourteen and sixteen were neither in school nor at work. Some of them were hunting jobs, but the majority were adrift on the streets or idle at home. The facts could not be ascertained until the continuation school, with its automatic requirement of attendance thereon the moment regular school membership ceased, was established.

Progress in employment bureau and placement work has necessarily been associated with the prevocational work of these schools. This is a most effective agency for keeping minors of this age group at work and off the street.

The original plans for continuation schools emphasized "follow-up" work at the homes and the places of employment of the pupils. A year's experience has justified this policy. Such follow-up work, however, should be incidental to specific problems arising in connection with individual pupils and it cannot be given a definite time allotment in the daily or weekly school program. The time for follow-up work is when the need is apparent.

By co-operation of home and employer, secured by follow-up work, the pupil comes to realize that regularity and punctuality are essential to success. His ambition is stimulated. As the school is not able to relate its work to many of the jobs in which these pupils are employed, the teacher need not possess a large knowledge of the job in order to direct the work of the pupil and to aid him to a better position. An errand boy in a commercial establishment is not likely to be promoted to a place as salesman. It may be his next job ahead, but if he is trained as a salesman a place would probably not be available. Usually there is no logical "next job" immediately ahead of the boy or the girl. Many employers select older youths and those of a different type for superior places. No training which the continuation school can give in the time at its disposal would fit the majority of continuation school candidates for such positions.

Follow-up work has revealed these facts. Pupils, when they are once informed as to actual conditions for advancement, are often stimulated to make special preparation for better posi-

tions. One notable effect of follow-up work has been to direct the attention of the pupils to industrial conditions and procedure and to devise ways and means whereby they may meet such conditions.

The most effective service by advisory committees has not yet been discovered. Experience shows that advisory committee members are in a position to give valuable counsel regarding concrete plans or programs.

Employers, on the whole, favor continuation schools in Boston. At the outset many said they would not employ pupils fourteen to sixteen years of age because of objections to legal restrictions controlling their employment. The attitude of the employer is largely determined by the supply of, and demand for, juvenile labor. During a period of depression in business employers are often able to secure minors over sixteen years of age to do work ordinarily performed by fourteen to sixteen year old boys and girls. When business is prosperous and labor scarce the employer will employ minors from fourteen to sixteen and not only accept, but often approve, the requirement of continuation school attendance. The continuation school in Boston was launched during a period of business depression. The law and the schools were held responsible for the loss of work of large numbers of minors, many of whom would have been discharged in any event. As business conditions have improved, many employers who had discharged and refused to take fourteen to sixteen year old pupils have since reversed their policy, and now express appreciation of the value of the school. This is, perhaps, most strikingly illustrated by the increased membership in the school. Since September of this year this increase has been about 1,000. There are now 3,000 pupils regularly attending the school. Many complaints which come to the school from the employers upon analysis prove to be of comparatively slight weight when the interests of the boys and girls involved are taken into consideration. It has usually been possible to satisfy the complainant by an adjustment of hours. Most complaints have come from employers of small groups of pupils. The genuine interest of employer in employee is shown by the frequent requests for information regarding the attendance of the latter on the school.

There is general testimony by employers that the school has assisted their employees. Many are of the opinion that there is less shifting of jobs when pupils attend the continuation schools. It has had a steadying influence, and certainly a great majority of the boys, and many of the girls, have developed a wholesome ambition to secure good and permanent places in industry. The girls have been perhaps more eager for homemaking work than they have been for better placement in industry.

Consideration of the admission and assignment of pupils in continuation schools has occasioned the review throughout the year of the question as to the trades or parts of trades for which it is profitable to furnish training. The inadvisability of disturbing pupils in their employment by directing them to another job became early apparent. A large number of juvenile occupations were formerly alleged to be "blind alley jobs" — jobs which held no possibilities for the future. It is now held that there are relatively few jobs of this character. In most fields of work in which juveniles are employed there is some possible better job ahead. Most of the wage-earning occupations of a community may be said to consist of strata making a pyramid, the smaller and less remunerative jobs being largest in number and comprising the bottom stratum of the pyramid and above these others more attractive but less numerous. Better positions may not be directly reached from places below, but there are possibilities of securing such work if they can be discovered. The continuation school can help the individual on a job to discover the way to the next job which is better for him. In many occupations into which continuation pupils go and which the activities of the continuation school cause teachers to study 95 per cent. of the employees have risen from the lower to the higher positions. The charge of the deadening effect of certain classes of work upon minors has been overemphasized. Beyond question there are many occupations which, pursued for a long period, would deaden ambition and energy; but ways and means of escape should be available, and with the vitalizing effect of the continuation school and the direction and help which can come from its activities there is no great danger from "blind

alley" callings. Opportunities grow out of nearly all forms of work and the school should help its pupils to see these opportunities, which they are not likely to do without help. Of 1,150 pupils investigated last spring, 650 had been promoted, and the school can properly be said to have been a factor in securing many of these promotions. The continuation school trains first for the work the pupil is now doing, if any such training can be given; next it trains him for a better position.

So far as possible the hours of attendance at the school are those most convenient to the employer. A very elastic program has been arranged by which pupils may come (a) four hours on one day of the week; (b) two hours on two days of the week; (c) one hour each of four days of the week. A sample program is given below: —

Typical Program of Studies — Continuation School

General improvement: —

1st hour: English, civics.

2d hour: arithmetic.

3d hour: commercial geography, spelling.

4th hour: English, mental arithmetic, hygiene.

Prevocational office practice: —

1st hour: business English, civics.

2d hour: commercial geography, hygiene.

3d hour: typewriting, bookkeeping, arithmetic, filing.

4th hour: typewriting, bookkeeping, filing.

Prevocational shop work: —

1st hour: shop mathematics, hygiene, safety.

2d hour: English, spelling, civics.

3d hour: shop.

4th hour: shop.

A full program of four hours' work (1st hour, 2d hour, 3d hour, 4th hour) is provided on each day, but in different sequence.

Combination A. — For a pupil coming four hours in a week, any morning or any afternoon of the week, the program on Monday or Friday would provide for him.

Combination B. — For a pupil coming four hours in a week, but on two different days on two consecutive hours, 8-10, 10-12, 1-3, 3-5, programs of two hours on Monday, Wednesday or Friday, and two hours on Tuesday or Thursday, would provide for him.

Combination C. — For a pupil coming one hour a day for the first four days of the week, or for the last four days of the week.

TIME.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
A.M.					
8-9,	1	2	4	3	1
9-10,	2	1	3	4	2
10-11,	3	4	2	1	3
11-12,	4	3	1	2	4
P.M.					
1-2,	1	2	4	3	1
2-3,	2	1	3	4	2
3-4,	3	4	2	1	3
4-5,	4	3	1	2	4

Those who have administered the school have reported that the proposed allotment of time, 50 per cent. to the shop, 25 per cent. to related work, and 25 per cent. to the cultural and non-related work, has been very satisfactory, and in the absence of more satisfactory data, this would seem to be a sufficiently correct allotment of time with which to continue.

The size of the class groups (15) gives a good chance for individual work in classes. Pupils come to a teacher for two hours' work, and then go to another teacher for another two hours. During a day each teacher meets two different groups of 15 pupils, a total of 30 different pupils. Two teachers meet 150 different pupils in a week. In this way team work is secured among the teachers, and the personal load is reduced. This reduces the direct responsibility of any one teacher to 75 pupils in a week. This would seem to be as far as the number of pupils per teacher could be reduced. Four hours of steady work by the same teacher with the same group is not as good an arrangement as the two two-hour assignment with two groups.

The problem of securing teachers for the continuation school will for a long time continue to be a serious one. Boston has undertaken to train its teachers, and for two consecutive years candidates for this work have been given training in co-operative classes, conducted in connection with the Boston school department. An earnest and interested body of young teachers has given careful consideration to the problems of

the continuation school. Too often the recompense offered by the school authorities has been insufficient to attract the type of teacher most desired, but in spite of this, an excellent corps of teachers are at work in the continuation schools. These training classes will be continued indefinitely. The validity of the principle that men teachers should be employed for boys and women teachers for girls has been well established by the experience of the past year.

This year's experience has given definite data with which to plan for the future developments of continuation schools. Municipalities do not seem disposed to undertake to operate compulsory continuation schools under the provisions of chapter 805. Until such time as it seems advisable to secure a State-aided compulsory law, advantage should be taken of the present statute by which voluntary classes may be formed. Wherever large numbers of minors fourteen to sixteen years of age are employed, our experience with employers would suggest that voluntary classes could be arranged for, and to the extent that a community may be persuaded to introduce them, will pave the way for legislation on a compulsory basis. Compulsory continuation school legislation should be requested of the General Court in 1917.

When legislation is requested, it should be for compulsory half-time continuation schools for boys and girls fourteen to sixteen years of age who have entered employment. The half-time employment and half-time school will occasion much less disturbance in business, and enable us to offer a program of a length to assure value to the pupil.

The present minimum period of four hours per week is in some particulars a very difficult period for business to adjust itself to, and this length of time is totally inadequate for us either to meet the legitimate demands of business or to adequately train the pupils who come to our school. It is defensible as an initial policy, but not as a permanent one.

Geographical area has little significance educationally. Because of the easy means of transportation, pupils live at remote distances from the centers of employment, and any attempt to establish geographical lines which ignore the entire area from which pupils are drawn into juvenile employment places

an additional burden upon the employers in the community which undertakes to operate these schools. The State is the smallest geographical unit for satisfactorily administering a system of continuation schools.

The work in these schools should be continuous throughout the year. There is very little logic in the arrangement whereby the service is interrupted for a long summer vacation.

THE TRAINING OF VOCATIONAL SCHOOL TEACHERS.

The problem of improving the quality of teaching in State-aided vocational schools has engaged the attention of the office of the Board of Education for some time. This problem divides into: (1) preliminary training of persons who wish to become teachers in State-aided schools, and (2) provision of agencies for the improvement of the teachers already in the schools themselves.

Charles R. Allen, who has charge of this work, and the essential features of whose report are given below, first reviews the results of the year's work.

Training classes for teachers in State-aided industrial schools were established by the Board of Education under authority of chapter 174 of the Acts of 1914. The following table summarizes results of the first-year's work:—

DISTRICT.	Located at —	Population represented.	Number of students enrolled.	Number completing course.	Received full certificate.	Received partial certificate.
Metropolitan, . .	Boston, . .	924,000	15	10	7	3
Merrimac valley, . .	Lowell, . .	198,000	12	8	4	4
Southern Massachusetts, .	New Bedford, .	116,000	11	6	1	5
Connecticut valley, .	Springfield, .	182,000	14	12	8	4
Central Massachusetts, .	Worcester, .	150,000	9	8	7	1

In securing a teacher for an industrial school the first problem has been to find a person who has a mastery of the trade to be taught. Such persons can be obtained only from shops and factories. Heretofore the State office, in approving teachers for industrial schools, has not required evidence either of

previous teaching experience or of specific training for teaching, since such a requirement would practically debar nearly all candidates having the required shop experience. Preliminary training courses aimed, therefore, primarily to give men having the requisite shop experience, personality, and general education a measure of specific training in the theory and practice of teaching. Students completing courses receive a statement as to work done based upon (1) a written examination, (2) a thesis, in which each man outlines a course of study in his own trade, and (3) recommendations by the local director and by the State agent in charge.

These courses have three principal objectives: (1) to make clear the distinction between the functions of vocational schools and those of schools with which they are likely to become confused, such as manual training or prevocational schools; (2) to give instruction in methods of organizing trade knowledge and experience into courses of study for industrial schools; (3) to describe various tested methods of instruction and to give practice in working out problems of instruction in specific trades.

The character of the men in attendance, the quality of their work, the ability shown in the preparation of theses and in examination papers demonstrate that it is possible to secure from industry many men capable of profiting by systematic instruction in the principles and practices of teaching as required in industrial schools.

The number of new teachers required by the existing industrial schools is not large. Many of the men trained last year may have to wait some time for employment. Hence it is advisable not to repeat courses in the centers named above (except Boston) during 1915-16. A few classes should be conducted at other centers where there still exists a demand not met by courses elsewhere.

The city of Boston now requires the holding of a special certificate by teachers in State-aided industrial schools. Candidates for these are required to have taken training courses. This makes it desirable that classes for both women and men should be established this year in the metropolitan district. Two classes will be established, — one for men, similar in char-

acter to that conducted last year, and one for women, designed especially to meet the requirements for teachers in the Girls' Industrial School. By courtesy of the Boston school committee the classes for women will be held in the Trade School for Girls and those for men in the continuation school building.

The agent supervising industrial school teaching has also given a substantial amount of time to the promotion of more effective teaching in the schools. He has held conferences with the faculties of the various schools and has furnished the teachers with printed material on which study and discussion have been based. This material was similar to that used in the evening classes. Seven conference groups were established, as follows: —

Group I., comprising the faculties of the Boston Day Industrial School for Boys, the Quincy Day Industrial School, the Somerville Boys' Vocational School and the Beverly Industrial School.

Group II., comprising the faculty of the Newton Vocational School.

Group III., comprising the faculty of the Worcester Boys' Trade School.

Group IV., comprising the faculties of the Springfield Vocational School and the Westfield Trade School.

Group V., comprising the faculties of the Smith's Agricultural School at Northampton and the Holyoke Vocational School.

Group VI., comprising the faculty of the Lowell Vocational School.

Group VII., comprising the faculty of the New Bedford Industrial School.

A schedule was arranged providing for eight conferences with each group, but it was found necessary to omit the last conference in most cases. Among the subjects discussed were: conditions of admission, departmental organization, the aim and function of the different schools as their faculties saw them, methods of instruction and a number of administrative questions. In some cases, notably in Groups I (Boston) and V. (Holyoke), especially good results were accomplished because of the willingness of the representatives of local schools to submit for discussion their methods of presenting certain lines of work. All these conferences proved especially profitable because of the co-operation of the teachers and the directors of the local schools, and in those cases where a group was composed of the faculties of several schools they served an

additional valuable purpose as a means of exchange of ideas and methods between the different faculties.

A part of the plan as originally submitted was to provide in some way for the admission of men who had successfully taken the evening training course into the State-aided schools on an apprentice teacher basis, the salary of these men to be in part, directly or indirectly, paid by the State while they were securing advanced training. Estimates were made for the cost of this portion of the teachers' training scheme, but the appropriation granted for this work was insufficient to enable any portion of this plan to be carried out. Therefore during the coming year it is not planned to make any move in that direction.

Mr. Allen is still strongly of the opinion that some such device as the apprentice teacher should be made a part of the training scheme and recommends it to the further consideration of the authorities. During the coming year it is proposed to continue the conferences under the general plan that was carried out last year.

Consideration is to be given in the near future to the following proposals:—

(a) The establishment of voluntary groups of teachers coming, if possible, from more than one school, for the purpose of studying problems of vocational school teaching. The proposed instruction is to be administered from the State office with the co-operation of the directors of the schools. In a number of schools the conferences resulted in the formation of such groups last year.

(b) The provision of additional training for those students who have successfully completed the preliminary evening course.

(c) The desirability of notifying all teachers now employed in day industrial schools that after June 30, 1916, one condition of continued approval on the part of teachers now employed, or employed after that date, will be evidence that they have given a certain amount of definite time and effort to work which this office will accept as in the line of professional improvement, and that until further notice attendance upon, and active participation in, either voluntary classes of the form suggested above or conferences will be accepted by this office as meeting that requirement.

The following table gives the data from which cost of the training of industrial school teachers can be computed:—

Evening classes, preliminary training:—	
Average number,	57
Length of course (hours),	80
Total instruction hours, ¹	4,560
Conferences, to any teachers in service:—	
Number held with each group,	7
Average length of conference (hours),	2
Total number of men present,	117
Total instruction hours, ¹	1,638
<hr/>	
Grand total instruction hours,	6,198
 Total twelve months' expenditure,	
	\$6,203 52

Cost of the Evening Training Course.

Salaries:—	
50 per cent. of agent's,	\$1,604 17
Clerical service,	375 00
Local directors',	500 00
Traveling expenses,	500 00
Miscellaneous expenditures, including cost of printing, less value of printed material now on hand,	225 00
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Cost for 6,198 instruction hours,	\$3,204 17
 Cost of instruction one student hour,	
Cost for evening class student, 80 hours,	\$0 50
Cost for conference, 14 hours (per teacher),	40 00
	7 00

The per capita cost of the preliminary classes, based upon the best available prorating of expenditures, salaries, etc., was approximately \$38 and of the conference work, \$6.75.

In addition to the formally organized work for preliminary training and the training of teachers already employed, considerable work has been done in giving individual teachers advice and counsel in the development and organization of their special lines of instruction. Naturally, work of this kind cannot

¹ One student in class one hour. This is now the generally accepted base for computing instruction cost.

be recorded upon any time basis, but has involved travel, time spent in conference, and also time in the preparation of work.

Mr. Allen submits the following brief analysis of the principles upon which the instruction in vocational schools is based:—

It is an axiom in educational work that the particular principles which should be followed and the methods by which those principles are put into concrete practice are dependent upon the purpose which it is desired to attain and the characteristics of the pupils whom it is desired to teach. This general axiom applies to day vocational schools as well as to other educational institutions, and since these schools have specific aims — namely, of training for efficient service in specific lines of industry — and since they deal with pupils having definite characteristics, it is possible to select from the various educational principles which are known to teachers those which are most likely to serve the purpose of particular schools and in the same way to indicate the methods by which they can be applied in the practice of the schools. Among these principles are two of especial importance, namely, the so-called principles of “apperception” and of “interest.”

Upon these two principles are based the following recommendations as to pedagogical methods to be employed in vocational schools: a complete vocational education consists of two phases — the theoretical or technical phase of the occupation and the manipulative or shop side. Hence there are two possible methods of procedure in vocational training: (1) to teach theory first, on the ground that practice is thus made easier; (2) to teach practice first, in order that theory may interpret practice. Having in view the aim of the school as stated above, this office has consistently recommended that no theoretical instruction should be given until after some degree of skill in practice had been secured and that theoretical or technical instruction should always be based upon a considerable amount of practical shop experience.

So, also, there are two ways in which the work of any school may be regarded: first, that the training given in the school constitutes complete training, and that so far as the organization and plan of the course of study go the pupil will never learn anything more; hence it becomes the duty of the school to train

him so far as it can not only to meet the demands which will be made upon him soon after he leaves school but also to meet the demands which may arise five, ten, or fifteen years later in life. Over against this is the other conception that it is necessary to recognize that the educational process never stops and that the essential problem is to equip the student as completely as possible for the more important needs which will arise during his earlier experience on leaving the school, leaving it to him to provide for his continued education as needs may arise. Obviously, in a vocational school there is involved the following question: Shall we include in our courses of study those things which the boy may need should he at some future time become a foreman? A pupil is being trained to be a carpenter. Shall the course of study include those things which he would need to know only in the event of his becoming a large contracting builder? These two views have been denominated as the so-called theory of immediate and deferred values. The State office has consistently held that the program of a State-aided vocational school should be based almost wholly, if not entirely, upon immediate values, since other agencies, such as evening trade extension schools, are open to the individual at all subsequent points in his career for such additional assistance and training as he may need.

The office has also held strongly that methods of instruction developed in these schools should be particularly based upon the principle of interest, not only in a general way, but specifically with regard to the character of the pupil with which these schools deal. Experience has shown that the majority of pupils applying for admission to these schools are desirous of learning a trade, and that the strongest appeal which can be made to their interest is that which appeals to their desire for trade knowledge and for doing work as it is done in the trade which they want to learn. A number of devices based upon this principle have been suggested by this office, among the more important of which is that recommending a much greater emphasis upon shop work than upon technical work in the earlier part of the course, even to the extent of letting the boys' first experience be entirely in the shop. It is believed that an experience of this kind in the case of many boys would

appeal very strongly to vocational interest and would, moreover, give an apperceptive base for technical instruction at a somewhat later period.

Experience has also shown that interest is maintained largely in proportion as the individual is able to do well what he is asked to do, and that this result is accomplished much better if pains are taken to see that the successive demands which are made upon him come in such a way that by applying what he has already learned he can solve the next problem. The working out of this in practice requires close correlation between the different groups of subjects, the drawing, the mathematics, the knowledge of materials of trade, the knowledge of processes, etc., which must be brought together and applied in the performance of a given job. The most complete correlation is undoubtedly found in the full use of the project method, as recommended in Bulletin No. 3. A partial correlation is found where the subjects taken up in the different courses, such as shop work, shop mathematics, etc., are so arranged and presented that the points reached in the various subjects relate to a common problem at any given time.

WORK FOR WOMEN AND GIRLS.

The work for women and girls in day and evening industrial schools and in schools for homemaking has gone without the direction of a special agent in charge of this activity. The work in evening practical art classes has been directly in charge of Miss Nellie M. Wilkins, while the other work has been directed by Mr. Small, assisted at times by special agents. Much progress has been made in developing home project work in schools of homemaking. In the evening schools a very satisfactory and substantial advance has been made with the short unit plan of instruction.

INDUSTRIAL SCHOOLS.

C. L. Pepper, inspecting agent of the Board, has made a number of special studies of current conditions in the State-aided industrial schools. The substance of some of his findings is given below:—

1. The activities of these schools are described by means of statistical matter collected and published last year, which has also been set forth in a series of charts now on exhibition at the Panama-Pacific Exposition. At the same time, this statistical material was analyzed, organized, and distributed to the various schools for their mutual information. As a basis for comparison these charts have served a valuable purpose.

2. The administration of that provision of the law under which non-residents gain admission to State-aided vocational schools has at times occasioned embarrassing situations. Municipalities have been called upon to pay tuition claims for non-resident pupils about whom they had little or no information. During the past year this situation has been remedied by introducing an improved method of procedure in admitting non-resident pupils to State-aided vocational schools. The procedure now is —

(a) A non-resident pupil applies for admission to the school.

(b) This application is submitted for consideration to the local school authorities, who may give an expression of opinion to the Board.

(c) The application is then presented for the approval or disapproval of the State Board of Education.

By this procedure all interested parties become conversant with the facts involved in the settlement of the case.

3. The departmental organization of industrial schools has received especial attention during the last year. Reimbursement by departments is a possible development of the near future. Looking toward the time when it may be desirable to go upon this basis departmental records of the finances of the schools are now being kept.

4. A list has been made of the books, periodicals and manufacturers' catalogues found useful for purposes of instruction at any of the schools. A study of the comparative usefulness of these, based on the experience of the schools, has also been made. Further analysis of this material is planned, the results of which will be put at the disposal of the several schools.

5. In a similar manner a study has been made of the equipment used in industrial schools in teaching the several trades. The usefulness of the various machines has been analyzed

and the results arranged comparatively in a series of tables which are valuable to the schools for purposes of comparison and standardization.

6. A number of municipalities have complained of the burdens arising from that provision of the law under which non-resident pupils may attend State-aided vocational schools at the expense of the city or town of residence. It seemed advisable to make a study of the effect of this particular legislation upon the tax rates of various cities and towns. Of 144 cities and towns studied, only 10 had their tax rate affected to the amount of 25 cents or more on each \$1,000 of valuation.

7. In order to secure competent teachers of trade subjects in State-aided vocational schools men otherwise competent as journeymen or foremen must be drawn from the industries. It has frequently been found difficult to attract these men into teaching because industry often pays better wages than the industrial school can offer. A study of the wages paid to foremen in various industries in this Commonwealth and an analysis of the results grouped by industries have been worked out in detail.

8. A school which undertakes to give trade training to its pupils must spend some time in keeping a record of the progress of those pupils. An attempt has been made this year to systematize that portion of the records which deals with the trade training given to the pupil. A card has been devised which will serve the double purpose of recording the trade experience which the pupil has received and of furnishing a basis on which to plan the further training of the pupil. This card will make possible a study of all facts involved in the training of the pupil. Records of this kind will be of use to prospective employers.

The above studies comprehend but a very small portion of the work of the inspecting agent. As opportunity has offered he has informed each school of the progress made by other schools. In continuance of this policy the program for the coming year includes a detailed comparison of the courses of study which have been worked out in all departments of the State-aided vocational schools in this Commonwealth.

COUNTY AGRICULTURAL SCHOOLS.

As a third county agricultural school will be established this year, and as two of these schools have already been in operation two or three years, R. W. Stimson devotes part of his report to the present achievements and future prospects of this type of school.

Broadly speaking, the proponents of the county agricultural school expect it to accomplish for the improvement of farming in the county things which cannot be done by State and Federal agencies, such as the Board of Agriculture, the Agricultural College, and the United States Department of Agriculture. A county school should supplement, but not duplicate, the work of other institutions.

The primary aim of the county agricultural school is to train its pupils for the practice of good farming. This aim is well stated in the published announcement of the Bristol County Agricultural School: —

The purpose of this school is not to give a general education, not to fit young people to enter any higher institution, but to qualify them intelligently to engage in productive agriculture, — to help them to become capable farmers, gardeners, dairymen, fruit growers or poultrymen. In undertaking to do this, it is well understood that there is much in the way of business acumen, executive ability and ordinary skill that the school cannot impart, just as it is true that the medical school cannot graduate its pupils as eminent physicians, or the school of technology graduate accomplished engineers.

On the other hand, there is a vast deal in the science and up-to-date practice of the farming business that the school can give, which will be invaluable to the farmer, and which, if acquired in the slow, hard school of experience, would cost him heavily in time and money. It can give the young farmer an excellent start in the right direction.

A secondary aim of the county agricultural school is to be a clearing house for information, easily accessible to those who are unable to attend the school as regular pupils. Such service will benefit, on one hand, farmers who wish to improve their farming, and, on the other hand, those who are seeking expert, disinterested advice regarding farming as a career, the purchase of farms or tracts of land, choice of a breed of live stock, and the like.

Both as a teaching establishment and as a clearing house for information, the county school should have headquarters accessible and adapted to its uses. It should have the best reference library on practical agriculture in the county, with books and bulletins so indexed as to facilitate reference to particular subjects. Provisions for exhibiting all kinds of agricultural products and rooms for holding meetings for the discussion of the phases of farming which can be made profitable in the county are valuable adjuncts. Land enough for some outdoor demonstrations of methods of farming better than are commonly found throughout the county, and of products, such as new varieties of fruit, which are believed to be exceptionally promising for the county might also be provided. In addition, there should be land enough to afford some practical work for pupils who come from village or city homes and who wish to become farmers and to secure preliminary training. Specially equipped agricultural laboratories for studying those phases of science applicable to practical farming are believed to be essential. Classrooms should be provided for instruction in such subjects as English, civics, accounts, agricultural economics, and farm management.

The county agricultural schools of Essex and Bristol counties each have about 100 acres of land, with well diversified soil and tillage conditions, at points exceptionally convenient for transportation by steam or electric lines. Each has specially designed buildings completed or in process of construction. Each has land for demonstration and for use by students, and each has laboratories and classrooms.

This description, from the current prospectus of the Bristol County Agricultural School, of the uses to which the school farm is put, applies also to the Essex County School:—

The farm is used primarily as an aid to instruction, but is managed as a productive farm, and it is intended gradually to develop the business until five or ten acres is devoted to each of the important branches of productive agriculture, that is to say, ten acres of orchard, five acres of small fruit, five acres of gardening, and so on. These operations, together with the work carried on at the pupils' homes, afford ample opportunity to give practice in the various farming operations, thus supplementing and supporting instruction given in the classroom or laboratory.

The work at the school farm is, therefore, usually carried on for the most part by the inexperienced, and it should not surprise any one if it does not always compare favorably with the best work of seasoned farmers. Our main crop is the boys and girls, — their education, — the farming is incidental to it.

The school farm is intended to serve a double purpose as laboratory for the boys and trial grounds for the county.

The county school has a larger enrollment than an agricultural department¹ in a high school, and, consequently, its staff of instructors is larger and more specialized. The staff of the Essex County School, with its enrollment of 175 students, numbers 14, and includes specialists in dairying, fruit growing, market gardening, home gardening, poultry keeping, bee keeping, and landscape gardening. Each instructor is a man of proved ability in his field of agriculture. Bristol County School has an enrollment of 54 pupils and a staff of 5 instructors. In the Bristol County School the agricultural specialists give all instruction, including English, science, mathematics, and accounts. In Essex County men who know farming intimately and who have worked in one or more forms of agricultural employment are chosen as teachers of the academic subjects. By this plan unity and harmony of aim in the teaching staff as a whole are secured, while the pupils have instructors who are, in a degree, specialists in every phase of their teaching. The principles which should govern in the choice of teachers for the county agricultural school are well stated in the prospectus of the Bristol County School, as follows: —

The teachers make the school. The aim has been to pick for leaders in the school virile men, who know farming from having earned their living on a farm, and who are also educated in the best that science, modern invention and experiment have brought to the aid of the farmer, — men who are at the same time of sound integrity and clean character, that their fellowship and example may be an inspiration to their pupils, and their instruction vital and interesting.

Four-year courses of instruction are provided at each county school. Most pupils need four-years' instruction, and abundant

¹ High school agricultural departments have only one instructor each, except at Concord, where the enrollment is 35 and where 2 instructors are required.

teaching material is available for such a course. Pupils may enter, however, for courses in any specialties in which they desire training. Some of these courses are for a year or even less. Some require two years. County schools with a large enrollment permit of specialization by pupils. Only pupils who wish to prepare to farm are eligible for admission. Graduates of high schools, or applicants who have had partial high school courses, are admitted as part-time pupils for technical and practical instruction. Those who enter at fourteen receive cultural as well as technical and practical training. The following more explicit statement regarding courses is taken from the prospectus for the current year of the Bristol County Agricultural School, under the heading "Project Study and Work:" —

The course of study is made each year to center on and support one particular branch of farming, so that the work of that year may be in some degree complete in itself, although at the same time it is preparation for the study of succeeding years. By this arrangement an excellent four years' course is provided, and yet it is possible for a pupil to enter for one, two or three years, and get full value for his time and effort. Furthermore, each pupil is required to undertake, during the year, a "project" in the productive agriculture about which his studies for the year center; for example, the second year, while studying small animals, it may be the management and caring for a few hives of bees, or of a flock of poultry or hog raising; hence the terms "project study" and "project work." In this project he makes his plans, carries out his work, does his own financing and marketing, and keeps careful records of the business, all of which is usually done at his own home, but under the direction of an instructor.

The advantages of thus co-ordinating the practical work and management of a farm project with the classroom and laboratory study may be summed up somewhat as follows: —

1. It emphasizes the fact that success in farming as in any other business depends not alone upon knowing how, but upon the ability to use one's knowledge, — that it is quite largely a matter of careful attention to detail; for example, a boy may know all about a hotbed, and yet in half an hour burn up the results of weeks of labor by neglecting to ventilate when needed.

2. In order to make a profit on his project he will find it necessary to discriminate between practical and impractical methods of work, and to reduce routine work to a minimum.

3. The pupil is brought face to face with the market and the marketing problems, and thus new emphasis is placed on the teaching that his business must be shaped up to meet the demands of the market.

4. Many farming operations, from the simple setting of plants to the more complex operations of caponizing a cockerel or budding a fruit tree, mean little until skill and facility in the work are acquired by doing it.

5. Questions of fertility, of culture, of insect pests and plant diseases, of feed for stock — in fact, nearly everything the pupil is studying — take on a new interest when incidental to a business enterprise for the success of which he is held responsible.

So far evening class instruction has been limited to the participation by instructors in evening meetings of farmers for the discussion of practical problems. Excellent results have been obtained by such conferences because the county school, in the case of adults as in the case of boys, follows up class instruction by visits to the farms of those advised. The United States Department of Agriculture and the Massachusetts Agricultural College are co-operating with the Bristol County School in the maintenance of a "county agent" whose principal business it is to advise individual farmers on their own farms and to couple this instruction with meetings of farmers where plans for the improvement of individual farms are thoroughly discussed and where reports of results are given. Service of this kind is welcomed by farmers, and, in fact, sought from the instructors as they go from farm to farm in supervising the home projects of their pupils. Such advice to the busy man at work on his own acres is indeed striking the iron while it is hot. The instructor cannot deal, to any extent, with generalities. His teaching is at once put into effect. Evening class instruction at the Essex County School is like in character, except that the Essex County School has not yet employed a county agent whose chief business is to give such instruction. The Essex County School has conducted, in co-operation with the Lynn Chamber of Commerce, evening classes in the city of Lynn for the benefit of people who are either intending to buy land or who now own more or less land which they desire to cultivate for profit.

Home project work has been admirably described by a pupil, in the following statement: —

My experience with this school has taught me that there are two kinds of projects. In the first place, there are those whose practical side the pupil is engaged in every day in the year upon his own farm. There are

also those which the pupil can put into practice but once a year. The first case can be illustrated with the project dairying. Nearly every pupil who studies this subject has a herd of his own. He has not been caring for it in a way to insure him the maximum production at the minimum cost. When he learns that by balancing the ration he can double the milk flow he naturally is anxious to try it. He may make a few mistakes at the beginning, but by experimenting he finally succeeds in producing the desired effect. Naturally encouraged with the results he takes added interest in his work, and, by putting the acquired knowledge into immediate practice, he obtains the benefit at once instead of in a year or two, when he has finished the course.

Now let us consider the other kind of projects. These we will illustrate with potatoes. This project is one the profits of which are to be realized only after three to five months of hard work and many expenses. These profits will be influenced by every move on the part of the pupil, according as it be correct or incorrect. Therefore before starting he must be absolutely certain that he is right, or the crop will be limited by his mistakes. Consequently, the pupil has no time to experiment, as with the dairy; for, while in this he may decrease the production of one cow for a day or two by his errors, in the second case he will be likely to lose \$150 or \$200. To be assured that he is correct he must make a thorough study of the subject, not taking one man's word as infallible, but reading the experiences of different successful potato growers and comparing them. He must do everything possible to exterminate the limiting factor which is bound to arise with every mistake. We can readily see, then, that although it is a very good plan to put knowledge into immediate practice, one cannot always afford to do so unless he be sure of the outcome. Therefore, in my opinion, these two methods of study should be retained in the school as two distinct systems, each to be equally important, and either one to be applied as the case may demand.

Now, of course, we have taken great interest in all of our projects, both at home and at school, but I think this interest has been caused to a great extent by the records and accounts which we keep. Each student in the dairy class is furnished with a record book in which he inserts every month the production of each cow separately. This he is able to do by the use of the milk scales and daily milk record sheets. He also weighs the grain and roughage fed the cows each day, and tabulates the total for the month in the record book. The milk of each cow is tested once a month, and in this way it is a very easy matter to find the profit of every cow for the year. We are also given blank sheets on which we keep account of all receipts and expenses on our crops. We are enabled to make the entries for labor at any time by the use of the daily time sheets which we make out every night. Therefore we can tell at any time the exact amount put on each crop or cow. In this way our projects are completed, and we have the satisfaction of knowing that they have been done right.

Working conditions at the homes of pupils on farms vary greatly. Some pupils do not live on farms, but hire land for their projects. Others are provided with land at the school. It has been necessary in only a few cases to provide land at the county school. Of the large enrollment of the Essex County School, where approximately 40 per cent. of the pupils are from village or city homes, only 11 in 1914 were obliged to conduct their projects at the school and only 5 in 1915. It is an advantage to be able to exemplify what is taught at the school, at least on a moderate scale. Group teaching is to some extent economical of the time of both pupils and instructors. Boys from poorly equipped farms should be given first-hand experience in working where equipment and other conditions are of the best. Boys from well-equipped farms will find at the school confirmation of their previous experience. Boys from villages and cities can work in groups under the direction of their more skillful mates or of their instructors, a necessary condition in the development of skill in the various operations in the branches of farming which are being taught. Such a condition is especially necessary in such operations as budding, grafting, seed sowing, transplanting, weeding, pruning, and spraying. As a county school abounds in odd jobs it affords opportunities for training boys in the use of woodworking and, to some extent, of ironworking tools. Here, again, a certain amount of group instruction is desirable, and is also economical of the time of instructors and pupils.

In group instruction the dangers of having the pupils assigned tasks which in effect result in "gang labor" are avoided by the requirement of the instructors that productive operations on the school farm shall be conducted by the pupils as carefully performed laboratory exercises. While these productive operations are primarily school projects the pupils performing them know the purpose or aim of each, understand the methods employed, and ascertain the profit or loss. Exploitation of the pupil is prevented by limiting the amount of time he devotes to participation in each school project. The individual pupil's course consists, usually, of cultural training for about 20 per cent. of the school time from the middle of

September to the middle of June; training in productive agriculture, including the execution of the pupil's own project, for about 50 per cent., and "related study," which bears directly upon the productive operations in which he is a participant, for about 30 per cent. In some cases pupils are employed morning and evening and at week ends on routine work in school projects, but for such services done out of school hours they are paid at the ruling price per hour.

The county school is in session twelve months in the year and its productive operations are continuous, subject only to interruptions due to seasonal conditions. It has not proven practicable, nor would it be desirable, to withdraw farm boys between the middle of June and the middle of September from participation in productive operations on their home farms. Along with the work done for his father each pupil, however, conducts his own productive projects, as it is part of the agreement under which he is admitted to the county school that he shall be allowed by his father necessary time and facilities for doing the home projects which he undertakes as part of his instruction. Instructors on live stock are allowed a month's vacation in summer and are continuously on duty for the other months of the year, two months being devoted to what has been termed "professional improvement" and nine months to teaching, supervision of home projects and superintendence of projects at the school. Plant project instructors — teachers of fruit growing, market gardening, landscape gardening, and the like — are on duty throughout the summer and have a month's vacation in midwinter. Plant project instructors spend nine months in teaching and in supervision of productive work and two months in so-called professional improvement. Professional improvement is coming more and more to consist of making farm management surveys within the county, or of special investigations into better methods of productive farming within their territory, both of which give the instructors better practical knowledge to be utilized in the training of their pupils. The past summer pupils who had applied for admission to the Essex County School in September were required to begin work on August 1. This rule applied to agricultural pupils who had no farm

work at home and were without employment on acceptable farms. Hereafter such pupils probably will be required to report at the school immediately upon leaving the public schools in June. This procedure will materially lengthen the period during which boys without experience in dealing with plants may work among plants and study them as they grow. In several similar cases pupils have reported to the Bristol County School for work during the summer months. This practice must be regarded as a development in the right direction. Work at the school, however, in such cases, as in all others, will be supplemented by every reasonable effort to lead the boys to engage in independent productive enterprises at or near their own homes, or to find employment on approved farms where they may be made acquainted at first hand, with the actual conditions under which work is done in the branch or branches of farming which they propose to follow.

REPORT OF BUSINESS AGENT BALDWIN.

Business Agent Baldwin devotes a large part of his report to a discussion of the recommendations of the Commission on Economy and Efficiency relative to centralization of accounting and the central purchasing of supplies for the State normal schools. (See page 109).

NORMAL SCHOOL PRINCIPALS' REPORTS.

The major portion of the time and effort of normal school principals and faculties is necessarily given to routine administration and teaching. In some of the schools, however, new developments of especial interest to the public are under way. To these, naturally, it is desirable that extended notice should be given. Each principal's report as made to the Board possesses features of interest, but in some cases the limited space available in the report of the Board permits that only a brief notice be given it.

Bridgewater Normal School.

By vote of the Board of Education the four-years course established in the Bridgewater Normal School in 1872 for the broader cultural preparation of teachers is to be discontinued

in 1917. No new students were admitted to this course this year. A new course designed to provide professional training for principals of elementary schools and union superintendents is now under consideration. Regarding other courses Principal Boyden writes in substance: —

The differentiation of the two and three years courses went into operation this year. All entering students now take the first year's work in common, thus laying foundations for teaching in all grades. At the end of the first year classes are organized in two groups: first, those who take one additional year in preparation for teaching in the first six grades of the elementary schools; second, those who take two additional years in preparation for teaching in grades 7 and 8, with special reference to the needs of the so-called intermediate school. The effect of this plan of organization on the selection of courses by students is not yet clear. Experiments bearing upon two very important problems are, however, being carried on simultaneously. The first is the reorganization of the upper grades of the training school in such a way as to exemplify clearly the fundamental principles on which the intermediate school is based. The second is the effecting of such reorganizations of schools in the neighborhood of Bridgewater through conferences with superintendents as will render most useful the services of teachers trained for upper-grade work.

For the study of these problems, Chester R. Stacy, former superintendent of schools at Easton, recently added to the faculty, is well fitted by training and experience.

During the year Bridgewater Normal School has made special efforts to get into close connection with the public schools of this section of the State. Two conferences with the superintendents have been held under the auspices of the Board and also a conference with school committees of towns in the vicinity. The department teachers of the normal school and the Superintendents' Association of southeastern Massachusetts have held monthly conferences to discuss various elementary school problems. Frequent visits made by supervisors and instructors to inspect the work of apprentice teachers, in service in 15 different cities and towns, have resulted in a much clearer understanding of the actual conditions under which graduates begin to teach.

The seventy-fifth anniversary of the founding of the school was duly observed June 19, 1915. The celebration included receptions and reunions; historical addresses and tributes; an exhibition of the work of the school at the present time; and an historical pageant symbolizing the life of the school and the advances in education made during its existence. A volume of the proceedings of the celebration, including a catalogue of graduates, has been published.

Fitchburg Normal School.

Principal Thompson recommends that the summer term of eight weeks, now conducted at the Fitchburg Normal School for men in the Practical Arts Department, be extended to include one section for women students just admitted and one section for teachers already in service. The courses offered would include all the regular courses in the Practical Arts Department for men and also elementary practical arts, drawing, and physical culture, including dancing and school games, for entering students and teachers in service. Mr. Thompson says, in substance:—

One of the general aims of the Fitchburg Normal School is to increase the length of its school year to at least forty-eight weeks, and to increase the length of the school week to six days and of the school day to eight hours, exclusive of lectures, entertainments, concerts, moving picture exhibitions, and other educational opportunities for pupils and parents in the evening. As a step in this direction the practical arts course for men was continued in 1914 through a summer term of eight weeks. In 1915, in addition to the summer course for men a summer course of five weeks for women was added. It is hoped in 1916 to have summer courses of eight weeks for both men and women, and to allow students who have been admitted to the normal school in any course to begin their work in July instead of waiting until September.

In case of men in the practical arts course it has been found entirely possible to do three years' work in two years plus three summer terms of eight weeks each. It is also possible for students entering the elementary course of two years to receive enough instruction at the normal school in the regular school year of forty weeks, a summer term of eight weeks pre-

ceding it, with a summer term of eight weeks following it, to be ready to begin teaching in rural schools for a year on salary under supervision of the normal school and after a year of successful teaching to receive a diploma. The elementary or two years' course, as now conducted, gives the student sixty-two weeks of study and observation, and fourteen weeks of practice teaching. By the plan suggested above of one year and two summer terms the student should receive fifty-six weeks of study and observation and an entire year of teaching practice in elementary schools.

Relative to the work of the Practical Arts (manual training) Department for men, Principal Thompson says:—

The normal school at Fitchburg is training young men to become departmental teachers capable of introducing a new type of manual training into public schools. The aim of this new practical arts work is to provide boys between the ages of twelve and sixteen with educational activities that will in a degree reproduce the practices, materials, and methods used in the actual occupations of life.

That superintendents of schools and boards of education are becoming more interested in this new work is shown by the growing demand for qualified special teachers. The new subject, considering the short time it has been in operation, as compared with the older parts of the curriculum, has come into gratifying prominence and favor. The public has responded well to requests, made by graduates at work, for better equipment and other facilities.

The graduates have found themselves confronted, as was to be expected, with such obstacles as are usually met by those making innovations in school work. They have been too busy to spend much time in acquainting the public with the aims and methods of their work.

Boys in courses in these forms of practical arts work have, through their enthusiasm, won the interest of parents and their support for its better development. Financial support is now being given more fully. School committees commonly apply to the Practical Arts Department of the normal school for new men to fill the vacancies made by the transfer of graduates to larger fields.

Many excellent suggestions as to improving the courses have been brought back to the Practical Arts Department by alumni who have had opportunities to become acquainted with the demands of the schools. The resulting changes and other necessary improvements are now overtaking the accommodations of the Practical Arts Department. The students have been crowded into makeshift shops in basements and attics, with a limited equipment. In fact, this equipment is inferior to equipment installed, in several cases, in some city and town schools.

Framingham Normal School.

Some interesting features of the report of Principal Whittemore of the Framingham Normal School may be summarized.

At the beginning of the school year the senior class of the Household Arts Department was divided into two sections. One section teaches cooking and sewing two days in the week and does nothing else on those days. The other section does the housework required in Crocker Hall, one of the boarding halls.

As this experiment is still in its early stages it is too early to make definite predictions as to its success. All present indications are, however, favorable. There are many opportunities presented by such an experiment in practical work for direct, personal study and application of sound principles of economy in the management of a household. The student learns by actual experience how to select and cook food so as to get the most nourishment at the least expense. It is difficult to meet all the demands made upon students in the other section for service in teaching sewing and cooking in the schools of the towns near by. Few institutions have greater opportunities for practice teaching by students.

Principal Whittemore's report also discusses the content of the course in household arts, particularly as to the relation between instruction in science and actual practice. The opinion is expressed that more emphasis should be given to fundamental elements, as sewing and cooking. Science, as such, should be taught only as a means of interpreting and understanding the processes which the student performs or observes in her actual work.

The tendency of the work in the Household Arts Department is towards mastering homemaking arts, as the center and goal of all instruction. We have been so set upon making our instruction logical and scientific that we have lost sight of the primary purpose of this department. We have not thought enough about the purpose of our instruction. We must ask constantly: Why are we doing this thing this way? What do we expect those whom we are teaching to get out of it? Our instruction has been too abstract, not closely related, and without reference to ultimate purposes of any sort or kind. This is wrong. The ultimate purpose of the cooking class should be to prepare the larger unit,—the full meal. In order to get the best results we should study more closely the pedagogy of cooking and sewing as subjects of instruction for those who are preparing to teach children.

The use of the normal school garden during the summer and the canning classes conducted during July and August by children of the neighborhood are new experiments of much interest. W. H. D. Meier, of the faculty, thus describes these activities:—

A garden of about one fourth acre is planted each spring by the students of the elementary department. Each Friday afternoon during the past two summers this plot has been used for giving instruction in cultivating crops, planting successive crops, and for teaching how to protect plants from pests and diseases. Near the school garden is a home garden planted with flowers and vegetables, to which the pupils have access. There were no regular classes. Students came singly and in groups at any time during the afternoon. Many teachers who were engaged in school and home garden work took advantage of the opportunity. A study of how to help children while the teacher is visiting home gardens, and how to overcome the various difficulties encountered by teachers of community gardens, proved to be an important feature of the work.

During the months of July and August, on alternate weeks, two-day sessions were held for the purpose of instruction on how to can and store vegetables and fruits for winter use. Twenty-four students were enrolled in this class. Twelve were

members of the Household Arts Department. The other members of the class were graduates of the school and teachers who had charge of gardening and canning classes in various sections of the State.

There is a strong demand for teachers in the first six grades who understand garden work and for teachers in the seventh and eighth grades who are familiar with both gardening and canning. Because of this demand it is advisable to continue the summer work during at least six weeks. Such students as complete the entire course successfully may be given a certificate similar to the certificates usually granted by summer schools.

The new dormitory with its large dining room enables the school to provide more adequately for the housing of its students and also to furnish students living in the village with meals. The question of housing at the Framingham Normal School is, nevertheless, by no means settled. As a result of increase in enrollment nearly a hundred students are compelled to room in the neighboring villages.

Hyannis Normal School.

Principal Baldwin gives especial attention to results of the practical arts instruction obtained in connection with the training of teachers for rural schools. The Hyannis Normal School has a self-supporting poultry plant containing about 300 fowls, the work in connection with which is done mainly by students. A substantial amount of school gardening is also carried on. That the influence of these two forces of practical work on the ideals and attitude of students is good is shown by the efforts made by rural school superintendents to get Hyannis graduates as teachers in rural schools.

Lowell Normal School.

Principal Durgin of the Lowell Normal School died on July 26, 1915. Until the election of John J. Mahoney, assistant superintendent of schools of Cambridge, as principal, Nov. 15, 1915, Dr. Weed, of the faculty of the Lowell Normal School, served as acting principal. Owing to the death of Principal Durgin the Lowell school submits no report this year.

North Adams Normal School.

Principal Murdock devotes a substantial portion of his report to an account of the extension work now conducted under the auspices of the North Adams Normal School. His tables and statements regarding this work are given herewith in full, because of the novel character of such instruction in normal schools.

Table showing extension work of North Adams Normal School, September, 1914 to September, 1915.

	FACULTY MEMBERS.									
	Mr. Murdock.	Mr. Smith.	Mr. Johnson.	Miss Skeele.	Miss Baright.	Miss Knowlton.	Miss Searle.	Miss Lamphier.	Miss Pearson.	Miss Waterman.
Cities and towns visited, .	10	8	11	5	6	15	2	-	-	37
Individual schools, . . .	-	-	11	13	14	18	2	-	-	80
Instruction in schools, . .	-	8	7	13	4	9	2	-	-	30
Addresses, educational meet- ings.	6	3	3	7	4	2	-	-	2	32
Addresses, sectional meetings,	-	-	-	-	2	2	-	-	4	7
Summer educational visits, .	-	-	6	10	-	-	-	1	1	-
Weekly summer school teach- ing.	-	3	-	-	5	-	-	5	-	-

Other educational activities of the normal school faculty:—

Mr. Murdock established a playground in connection with the Mark Hopkins training school.

Mr. Smith is closely identified with the Boy Scouts and with the educational department of the Hoosac Valley Agricultural Society.

Mr. Johnson promoted woodworking in the Center School of Lanesborough and has prepared lessons for the correspondence course in woodworking.

Miss Skeele has received at the normal school five or six classes of children with their teachers from neighboring schools for instruction in folk dances and games and has promoted the establishment of playgrounds in North Adams.

Miss Baright has served on committees making courses of study, conducts the senior play annually, and is in demand for instruction in English at summer normal schools.

Miss Knowlton made an inspection of the work in cooking and sewing in the places visited, introduced cooking in two rural schools in Charlemont and sewing in the schools of Cheshire, and taught millinery and decoration to an evening class of clerks and stenographers.

Miss Searle, who has been among the most active in visiting and assisting rural teachers, has been obliged this year, for good reasons, to lessen her extension work.

Miss Lamphier promoted hand work for the first six grades in several towns last year, but for sufficient reasons has not continued extension work this year.

Miss Waterman, in addition to her regular work, arranges the short winter courses, gives much instruction therein, and is practically the chief "call" member of the faculty. The statistics indicate the range of movement, but fail to describe the excellence of her work.

Miss Cole and Miss Lyman of the rural training schools have been called frequently to assist superintendents in the conduct of meetings of teachers and of parent-teachers' associations. Miss Cole for two seasons has taught during the summer session at the Castleton, Vermont, Normal School. Other teachers have been interested in visiting schools which admit of direct comparison with their own and which in some cases, by contrast of condition, clarified certain problems of mental training and control.

The normal school at North Adams, since February, 1911, has conducted correspondence courses for teachers in Massachusetts. For the first year the only courses offered were psychology and language, history and geography. In April, 1912, the correspondence work was organized as a separate department, in charge of Hannah P. Waterman. The number of courses offered has steadily increased, until now they include psychology, language, history, geography, English grammar, literature, arithmetic, and economics as general subjects; cooking, sewing, paper construction, raffia work, yarn weaving, and elementary woodwork, as adapted to the first six grades; and special courses in woodworking for the older grades given to teachers situated where such work is feasible. Eighty-seven teachers, most of them not graduates of normal schools, are taking the correspondence courses. They represent 85 towns, ranging from Provincetown to the New York boundary.

Each course includes the work prescribed for students in residence, and is formulated in notes adapted to instruction by correspondence. Each lesson requires the teacher in charge to plan work for her own pupils in accordance with directions in the notes, and to send in her plan with comments. The corrected plan is returned to the student with suggestions for modification or extension of work, comments or questions concerning principles involved, and pertinent extracts from reports of other correspondence students. Illustrative and reference material is suggested and in many cases loaned. The correspondence student puts the plan into operation when feasible and renders a report of work accomplished. This report is in turn commented upon by the instructor. Products in cooking, sewing, and woodworking, if not too large, are sent for inspec-

tion, or they are examined locally. The length of time necessary for each student to complete a course is determined by individual conditions. No charge is made for tuition to teachers of this State. The expense incurred is entirely for printed notes and postage, and entails no sacrifice of salary.

Professional gains of this work include the following: (1) Pedagogical instruction is available to any teacher; a lesson is always at hand; and the student can apply herself to study wherever she lives. (2) The correspondence teacher makes direct application of each pedagogical principle considered or method advised and tests the value of each suggestion in the instruction of her own pupils. (3) Defects in methods of instruction are revealed because the teacher must test her own knowledge and organize her own thinking in preparing written plans or reports of work. (4) The student has time to weigh suggestions, and by comparing the instructor's comment with her own plan and report, and by estimating the experience of other teachers, her pedagogical insight becomes keener and more definite. (5) The work develops initiative and self-reliance, because in applying principles, testing practices, developing or revising methods, and formulating judgments the teacher grows ingenious, self-directive, and sensible. (6) Planning and revision of work lead to economy of effort and effectiveness of instruction. The teacher learns how to do better work more easily. (7) The discussions bring the teacher into fellowship with others of similar interests. By consideration of experiences of other teachers any sense of isolation is replaced by a feeling of identification with the forward movement in education. (8) The work inspires enthusiasm for progress, cultivates patience with details, and arouses professional spirit. The teacher takes delight in doing her work well and grows zealous to meet each child's needs. (9) Visits of the instructor with correspondence students have demonstrated the value of sympathetic, co-operative effort. In addition to knowing the teachers individually, the instructor has come into closer touch with the superintendent and the community and has been enabled to take part in meetings of teachers, parent-teachers' associations, and granges. (10) Inasmuch as the instructor in charge of correspondence courses supervises the rural training schools, the

fresh insight gained from contact with rural conditions elsewhere reacts upon the administration of each of these schools, and directly influences the training of normal students in their practice. The correspondence courses, with associated visiting, certainly give extended knowledge and appreciation of rural needs and vitalize normal school instruction.

These courses definitely function, even when but few lessons are taken, in greater understanding of children, in growth of teaching power and administrative ability, and in increased professional zeal. Both professional and academic gains which cannot be revealed by statistics are realized. They find practical expression in the daily life of at least 267 schools. To some degree the value of the work is expressed by comments of corresponding students, *e.g.*: —

"Although my history has always been one of my weakest points, I know I shall enjoy this course, as I am much interested already. Thank you for the help you have already given me."

"The preparation and giving of the lesson was a great help to me. The pupils gave strictest attention. . . . I have noticed marked improvement in their speech this year."

"I had never before thought how children learn to read."

"I found, in teaching the lesson according to this method, the class learned the poem very quickly." . . .

"The comments are especially helpful."

"The content of the plan was valuable to me in that it gave me such a good idea for the lessons to follow. The outline is clear and therefore gives a good definite plan to work by. The list of materials was also very valuable to me. I used . . . of those suggested."

"As you see, I have changed my position. . . . I made it a condition of acceptance that Mr. — let me continue the course."

"What I have done in the course has helped me much, and I appreciate and thank you for your kindness and patience in helping me."

Principal Murdock states that but a small proportion of those enrolling complete a given course. In the case, however, of those who enroll for a second course the number who continue to the end is large. The advantage of completing a course is so manifest that every effort should be made to increase the number so doing. This result can be best obtained by personal visits to those taking courses. Principal Murdock closes with the following recommendations: —

The amount of work entailed by the present yearly registration is impossible of effective accomplishment. An assistant instructor to conduct several of the courses is necessary to insure promptness in administration and in visitation of corresponding teachers. With an additional appropriation for traveling expenses at least one personal visit to each student during a course would become possible, as was planned at the inception of this work. The relatively few visits made have revealed more clearly the needs of pupils, teachers, and superintendents, and have suggested important modifications tending to make the instruction even more effective.

Short winter courses were instituted in February, 1901, for the benefit of teachers, not graduates of normal schools, who have long winter vacations. The registration in these courses in 1915 was 24. The course consists of a series of lessons on subjects of most immediate importance, the lessons being given by instructors from both normal and training departments. Illustrative lectures are given in the training schools before groups of teachers. Questions submitted by visitors are discussed at the close of the lesson. The short winter courses develop interest in the correspondence courses and the correspondence courses in turn stimulate interest in the winter courses. In order to continue the short winter courses a new teacher should begin work Feb. 1, 1916.

A number of the members of the training school faculty have engaged in extension work in towns and cities in the vicinity of the North Adams Normal School. Such work includes the establishment of playgrounds, co-operation in educational work of the agricultural societies, improvement of woodworking in schools, folk dancing and games for children and teachers from neighboring schools; work on courses of study under the auspices of the Board of Education; inspection of work in cooking and sewing, and introduction of cooking in rural schools; development of hand work for the first six grades, and addresses at meetings of teachers and parents' associations.

A special class has been formed at the Mark Hopkins school for children who are defective and therefore require special training. These pupils are members, also, of the regular classes, but are sent to the teacher for additional instruction.

Salem Normal School.

The normal school at Salem has during the past year inaugurated an interesting new stage of work in its Commercial Department. Mr. Pitman reports: —

During the past year it was decided to impose the requirement of a year's practical business experience as a condition of admission to senior work. This lengthens the regular course to four years and will serve to increase the efficiency of all the graduates. The financial cost to the school of this additional year is slight, but it entails a substantial increase in the supervisory duties of the department. The new arrangement will necessitate a critical examination of the course for the first two years and doubtless some modifications in preparation for the vocational work of the third year. The details of the extent and character of the supervision required for the outside work are yet to be determined. The co-operation of business establishments must be fostered. The new requirement has not diminished the number registering in the department. It may prove that it will increase registration, as it enables students to take the course who would otherwise be financially unable to do so.

Westfield Normal School.

Principal Brodeur, after noting the increase in the enrollment of the school at its opening, which made the attendance at that time larger than at any time previous in its history, states that the dormitory is now fully occupied and there are 27 students rooming outside.

Principal Brodeur emphasizes in his report the desirability of giving more attention to the study of literature, particularly in regard to its use in teaching children. The course in literature should include a consideration of children's books and current periodicals for children and should also present certain aspects of library economy. Voice culture as a means of correcting speech defects and to improve the voice as used in the schoolroom might well be a part of this course.

It is suggested that a course in subject-matter and methods in United States history might well be added to the curriculum.

Normal school pupils should also be given an opportunity to discuss present-day problems in economics and politics, possibly in connection with work in community civics.

In accordance with the suggestions of the Commissioner of Education, changes are being made in the work of the school with a view to giving the students a more immediate grasp of schoolroom problems. An increasing amount of attention is being paid to correctness of speech in English, to writing, on both paper and blackboard, and to representation by drawing. Prospective teachers are thus given a grasp and confidence that must make for efficiency in the schoolroom.

Worcester Normal School.

Principal Aspinwall, of the Worcester Normal School, in his report gives special attention to the public activities of the teachers of the normal school.

In addition to instruction in the regular class work in the reorganized curriculum, our teachers have been urged to extend their influence by giving lectures and taking part in other activities related to their work.

J. Mace Address has been chairman of the committee on hygiene of the Public Education Association of Worcester for the past year, and in pursuance of that work has edited a series of articles which appeared in the daily press on "Health Problems of School Children," written by physicians of Worcester, he contributing one article of the series himself. He has prepared a chapter entitled "Teaching of Hygiene in the Elementary School" for a book on "Educational Hygiene," edited by L. W. Rapeer of Pennsylvania State College. Mr. Address is the only normal school representative among the writers of the various chapters. He is also author of an article entitled "Free Publications for Teachers of Hygiene" which will soon be submitted for publication. During the past summer he gave two courses in the Department of Education at the summer session of Middlebury College.

Miss Ruth A. Babcock has been active in promoting the "community civics" aspect of her kindergarten work by conducting mothers' meetings and giving talks before women's

clubs and teachers' associations of this city. The work that she has done in this department has been sufficiently appreciated to result in doubling the number of students taking the kindergarten course.

Horace G. Brown has spoken twice before the grade teachers of Northborough, Southborough, and Shrewsbury on "The Problems of History Teaching." He was invited by the school department of Gardner to officiate as judge in their prize-speaking contest. He published in the September number of "Education," in collaboration with Miss Stephanie A. G. Glass, an article on "What Functions in the Rural School." He has been also actively identified with the Public Education Association of Worcester for a number of years.

Jesse W. Hubbard published in the "Journal of Geography" an article entitled "The Climate of Florida in Relation to the State's Most Important Industry," and is now preparing an article on "A Phase of the Teaching of Geography in Relation to Rural Schools" for early publication. He has also lectured before the Worcester Women's Club on "The Geography of Worcester."

Miss King has been in close touch with the superintendency unions of Worcester County, in inspecting the work done in drawing and practical arts, and in acting in an advisory capacity with some of the superintendents. She has also spoken at several parent-teachers' association meetings in surrounding towns.

Miss Osborn has spoken on "The Teaching of Reading and Literature" before the teachers of Blackstone and that vicinity. She has also issued a pamphlet entitled "Rural School Libraries at Small Cost." She has written an article for the daily press on "The Improvement of School Grounds and Interiors" and another under the same title which appeared in the May number of "Education."

Miss Mary B. Pratt contributed an article to the September number of the "Kindergarten Review" on "Rhythm in the Kindergarten and the Lower Grades."

Lee Russell made an investigation of the hygienic conditions of the school buildings in Blackstone in October, 1914, taking photographs of the same and aiding the superintendent

in bettering the conditions. In December he visited the schools of Shrewsbury, Northborough, and Southborough with Superintendent Van Ornum, making a careful inspection of the conditions under which our graduates are teaching. In February he contributed an article on "Heating and Ventilation" to a series issued by the Public Education Association. In February he addressed the Worcester County Superintendents' Club on the subject "The Superintendent and the Normal School Graduate."

Miss Anna P. Smith addressed the teachers of Northborough, Southborough, and Shrewsbury in December on "The Teaching of Arithmetic."

Miss Arabella H. Tucker last fall gave a series of six lessons on "Fall Birds and Flowers" at the Natural History Society and again, in the spring, ten lessons on "Insects," at the same place. In February she gave a lecture on "Alaska" (illustrated) at the normal school and a lecture on "Birds" before the Parent-Teachers' Association of Stoneville.

These are some of the ways in which our teachers have brought the normal school to the favorable attention of the public. They are indicative of many other ways in which the influence of the school is being felt, and will be further extended as time goes on. We believe that our work can be much aided by these close associations with the field which we serve. I am very glad to say that the teachers of the normal school have responded to my urging in a very cordial way. I expect that a great deal more publishing will be done by them in the near future.

During the past three years the school has also emphasized the study of rural education, inasmuch as the graduates usually do their first teaching in the rural schools. A conspicuous effort in this direction has been our annual conferences on some phase of rural education. This has become a fixed institution in the school and has had a splendid effect in drawing the attention of superintendents and teachers to the work we are doing and in creating an interest on the part of the school in the rural schools of our vicinity. It has also gained us recognition throughout the entire country. We have received requests for information and literature bearing upon our con-

ferences from many States in the Union. We have issued various articles and pamphlets on our conferences and in discussion of several phases of rural school work. We have been invited to become a member of the Massachusetts Federation for Rural Progress. Through these means and with the employment of a greater number of our graduates in the rural schools we have been brought into much closer touch with non-urban conditions, and the Worcester Normal School now occupies a position of some authority in this part of the State on this phase of educational work.

We believe that more can be done in this direction by arrangement with some towns for model rural schools under our direction. We have already conferred with the superintendent at Blackstone about this matter, and he is ready, as soon as local conditions permit, to set apart one of his two or three room schools for our use. This arrangement would offer opportunity for our students to have valuable practice and also serve as a model to the community in the improvement of general school conditions. I think that similar arrangements could probably be made in Shrewsbury, Holden, Millbury and West Boylston. It is not likely that it would be desirable to establish very many such rural schools at once, but we would do it as rapidly as conditions seem to warrant. Another suggestion is that a model school should be established at some point convenient for the joint use of the Fitchburg and Worcester Normal schools, and provided with sufficient land for the study of agriculture and school gardening, with emphasis upon those phases best adapted to the locality. Such experimental schools could be established in several places at easy distances from several of the normal schools, so that more than one normal school could profit by the same model school. We are aiming to follow up our work in rural education by visits to the rural schools where our graduates are teaching, by securing reports from them on the work they have done, and also upon the value of the work they did here, and by having our seniors visit and make reports upon rural schools.

Massachusetts Normal Art School.

As the report of the Massachusetts Normal Art School will this year be devoted largely to such an explanation of the aims and prospects of this school as may be necessary to acquaint the Legislature and the State with the needs for, and possibilities of, the new building for the erection of which an appropriation is being asked, it will be published as a separate document.

PART III.

DETAILED REPORT

OF THE

WORK OF THE BOARD.

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DETAILED REPORT OF THE WORK OF THE BOARD.

- I. Summary of Statistics.
- II. State Normal Schools.
- III. High Schools: —
 - Approval of High Schools for the Privilege of Certification to State Normal Schools.
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- VII. State-aided Vocational Education.
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- IX. Massachusetts School Fund.
- X. Financial Statement of the Board.

PART III.

DETAILED REPORT.

I. SUMMARY OF STATISTICS OF THE PUBLIC DAY AND EVENING SCHOOLS FOR 1914-15.

An abstract of the school returns for the school year 1914-15, giving data for each town and city and totals for the State, is found on pages i to xcvii.

A summary of statistics of attendance and expenditures for the school year July 1, 1914, to June 30, 1915, also of expenditures for the last preceding town or city fiscal year, follows:—

A. — *Summary of Statistics for School Enrollment, Membership, Attendance, Teaching Force and Expenditures for the School Year July 1, 1914, to June 30, 1915.*

I. SCHOOL CENSUS DATA.

1. Number of persons in the State Sept. 1, 1914, between the ages of five and seven years,	122,238
2. Number of persons in the State Sept. 1, 1914, between the ages of seven and fourteen years,	428,916
3. Number of persons in the State Sept. 1, 1914, between the ages of fourteen and sixteen years,	100,817
4. Number of illiterate minors in the State Sept. 1, 1914, over sixteen years of age,	27,013

II. AVERAGE NUMBER OF DAYS THE PUBLIC DAY SCHOOLS HAVE BEEN IN SESSION.

1. Average number of days the public day schools have actually been in session during the year,	183
2. Average number of days the high schools have actually been in session during the year,	189

ERRATUM.

For number of illiterate minors in the State, Sept. 1, 1914, over sixteen years of age, substitute the following figures: —

17,413.

III. PUBLIC DAY SCHOOL ENROLLMENT AND ATTENDANCE DATA.

1. Total enrollment of pupils of all ages in the public schools during the school year,	591,582
Increase,	15,072
2. Average membership of pupils in the schools during the school year,	541,088
Increase,	18,726
3. Aggregate days of attendance of pupils in the public schools during the school year,	92,793,785
4. Average daily attendance in all the public schools during the school year,	506,910
Increase,	20,041

IV. PUBLIC DAY SCHOOL TEACHERS.

1. Number of teaching positions in public schools, kindergarten, elementary and high, Jan. 1, 1915, .	18,242
(1) Supervising principals and principals,	768
(2) Supervisors,	780
(3) Teachers,	16,694

V. PUBLIC DAY HIGH SCHOOLS.

1. Number of public high schools,	257 ¹
Decrease,	12 ¹
2. Number of teachers, including principals, in high schools,	3,227
3. Number of pupils enrolled in high schools,	81,853
Increase,	5,333
4. Expenditures for high school support,	\$5,371,359 48
5. Cost per pupil in average membership,	\$70 31
6. Average membership of pupils in high schools,	76,396
7. Average number of days actually in session,	189
8. Aggregate days of attendance,	13,490,689
9. Expenditures for salaries and expenses of principals and for salaries of teachers in high schools,	\$3,719,422 66
10. Cost per pupil in average membership of high schools, for salaries and expenses of principals and for salaries of teachers,	\$48 69

¹ Academies or other schools serving as high schools in towns, but which are not "under the order and superintendence of the town authorities," are not reported this year as public high schools.

VI. COST OF ALL THE PUBLIC SCHOOLS FOR SCHOOL FISCAL YEAR
ENDING JUNE 30, 1915.

Support.

1. Total expenditure for the support of public schools, \$22,272,186 10

Increase, . . \$725,590 43

This expenditure is distributed among
the following classes indicated in the
statutory definition of support:—

- (a) School committee and business
offices, \$393,694 18
Increase, . . \$68,548 14
- (b) Superintendents' salaries and
business expenses, . . . 615,836 40
Increase, . . \$33,610 96
- (c) Principals' salaries and expenses, 1,464,151 82
Decrease, . . \$263,070 39
- (d) Supervisors' salaries and expenses, 469,926 06
Increase, . . \$19,745 39
- (e) Teachers' salaries, 13,325,134 05
Increase, . . \$652,354 81
- (f) Text-books, 491,158 68
Increase, . . \$37,902 41
- (g) Stationery, supplies and other
expenses of instruction, . . 674,801 13
Increase, . . \$8,194 34
- (h) Janitors' service, 1,522,516 32
Increase, . . \$56,212 75
- (i) Fuel, 1,009,460 75
Increase, . . \$22,569 88
- (j) Miscellaneous expenses of opera-
tion, 298,379 43
Increase, . . \$27,833 89
- (k) Repairs, replacement and upkeep, 978,970 65
Decrease, . . \$48,849 54
- (l) Libraries, 2,402 20
Decrease, . . \$3,802 28
- (m) Promotion of health, 132,054 90
Decrease, . . \$9,784 67
- (n) Transportation, 467,296 10
Increase, . . \$41,021 99
- (o) Miscellaneous, 426,403 43
Increase, . . \$83,102 75

Outlay.

2. Total expenditure for buildings for the public schools, \$4,534,110 44
 Increase, \$588,413 65
 (a) New grounds, buildings and alterations, \$4,263,528 59
 (b) New equipment, 270,581 85

Support and Outlay.

3. Total expenditure from all sources for support and buildings for the public schools, that is, for all public school purposes, \$26,806,296 54
 Increase, \$1,314,004 08

VII. COST OF THE PUBLIC SCHOOLS PER CHILD.

1. Cost for support, including State and other contributions as well as money raised by taxation, for each pupil in the average membership of the public schools, \$41 16
 Decrease, \$0 09
 2. Cost for support and buildings, including State and other contributions as well as money raised by taxation, for each pupil in the average membership of the public schools, \$49 54
 Increase, \$0 74

B. — *Cost of Support of All the Public Schools for the Last Preceding Town or City Fiscal Year.*

I. TOTAL EXPENDITURE FOR THE SUPPORT OF PUBLIC SCHOOLS.

1. Total expenditure for the support of the public schools, \$21,864,471 68
 Increase, \$1,064,115 20
 (a) Amount included in the total expenditure for support, but derived from other sources than local taxation or its equivalent, such as aid from the State and income from local funds, \$689,948 89
 Increase, \$50,972 61
 (b) Amount raised by local taxation and expended for the support of public schools, being the total expenditure for such support diminished by contributions from other sources than local taxation, \$21,174,522 79
 Increase, \$1,013,142 59

II. COST OF THE PUBLIC SCHOOLS PER CHILD.

1. Taxation cost of the public schools for support for each child in the average membership of the public schools,	\$39 13
Increase,	\$0 53
2. Cost for support, including State and other contributions as well as money raised by taxation, for each child in the average membership of the public schools,	\$40 41
Increase,	\$0 59

III. PERCENTAGE OF STATE VALUATION EXPENDED FOR PUBLIC SCHOOL PURPOSES.

1. Percentage of the total State valuation (April 1, 1914) raised by taxation and expended for support of public schools, . . . . .	.004 ⁷⁵ / ₁₀₀ or \$4.75 per \$1,000
Increase, . . . . .	.000 ²¹ / ₁₀₀ or \$0.21 per \$1,000

II. STATE NORMAL SCHOOLS.

Normal school data, showing number of teachers, admissions, attendance, etc., for the school year ending in June, 1915.

STATE NORMAL SCHOOLS.	TEACHERS IN —				TOTAL ENROLLMENT OF STUDENTS IN NORMAL SCHOOLS FROM SEPTEMBER, 1914, TO JUNE, 1915.		Average member- ship of pupils in model and practice schools.	New students admitted to normal schools in Septem- ber, 1915.	Number of graduates from normal schools in June, 1915.	Number of graduates from the begin- ning.	Average attendance of students in normal schools for week ending October 16, 1915.
	NORMAL SCHOOLS.		MODEL AND PRACTICE SCHOOLS.		Men.	Women.					
	Men.	Women.	Men.	Women.							
Bridgewater,	7	13	1	13	33	377	419	197	157	4,745	424
Fitchburg,	9	9	1	11	83	273	649	187	98	1,018	381
Framingham,	7	17	—	11	—	345	291	177	99	3,464	362
Hyanis,	3	6	1	6	9	47 ¹	243	36	24 ²	409	60
Lowell,	3	7	2	29	1	178	1,000	127	69	994	213
North Adams,	3	6	—	20	—	138 ³	677	117	52	805	153
Salem,	8	13	1	8	31	374	559	206	167	3,725	390
Westfield,	4	5	—	13	—	206	484	112	89	2,669	207
Worcester,	6	10	—	14	5	209	503	120	70	1,634	247
Normal Art (Boston),	13	8	—	—	67	279	—	99	72	1,859	338
Totals,	63	94	6	125	229	2,426	4,830	1,378	897	21,322	2,775

¹ Not including 268 students in the summer session.

² Not including 6 graduates from the summer session.

³ Not including 132 students in correspondence courses.

III. HIGH SCHOOLS.

Approval of High Schools for the Privilege of Certification to State Normal Schools.

Of the 250 public schools in Massachusetts that in 1914-15 offered four years of high school work, 212 had the privilege of certification to State normal schools. Of these, 76 were approved directly by the Board of Education, and 136 were allowed the privilege on the ground that they had been approved by the New England College Entrance Certificate Board. Consequently, there were, in 1915, only 38 public schools offering four years of high school work that did not have the privilege of certification to State normal schools.

Schools approved in both 1914 and 1915 by the New England College Entrance Certificate Board and published in its list of approved schools had the privilege of certification to State normal schools in 1915, and will continue to have this privilege in 1916. After 1916 the certificate privilege will be limited to public high schools in Massachusetts approved by the Board of Education. Candidates from schools outside the State will be dealt with on an individual basis.

The 76 schools that were approved by the Board of Education for the privilege of certification to State normal schools for the year 1915 follow. This list does not include schools that had the certification privilege on the ground that they had been approved by the New England College Entrance Certificate Board.

Amesbury,	Charlemont,	Essex,
Ashfield,	Chatham,	Fall River, Technical,
Avon,	Chelmsford, Center,	Great Barrington,
Billerica,	Chelmsford, North,	Hamilton,
Boston, High School	Cohasset,	Hardwick,
of Practical Arts,	Douglas,	Holbrook,
Bourne,	Dover,	Holden,
Braintree,	Duxbury,	Hopedale,
Brewster,	East Bridgewater,	Hopkinton,
Brookfield,	Easton,	Huntington,
Canton,	Edgartown,	Lancaster,

Lenox,	Plainville,	Tisbury,
Littleton,	Randolph,	Topsfield,
Ludlow,	Reading,	Walpole,
Medfield,	Rockport,	Watertown,
Merrimac,	Shirley,	Wayland,
Millbury,	Shrewsbury,	Westborough,
Millis,	Somerset,	West Boylston,
Nantucket,	Southborough,	Westford,
Northborough,	South Hadley,	Westminster,
Northfield,	Spencer,	Weston,
Oak Bluffs,	Sterling,	Williamsburg,
Orleans,	Stockbridge,	Wilmington,
Oxford,	Stow,	Worcester, North,
Pembroke,	Sutton,	Yarmouth. — 76.
Petersham,	Templeton,	

Of the 76 high schools that the Board of Education approved directly, 43 were ranked in Class A and 33 in Class B. In making this ranking the Board dealt with the schools constructively. When a school was approved in Class B, the superintendent was informed of the reasons why it was not approved in Class A. There is no doubt that the provision for a Class B ranking of schools is of decided benefit in many ways. It enables a school that does not quite meet Class A standards to certificate the more capable pupils who desire to enter normal schools, and at the same time does not give full recognition to such a school.

Proposed regulations regarding the approval of high schools for the privilege of certification to State normal schools were drafted and sent to all superintendents of schools and principals of high schools in the spring of 1914, and a second draft was submitted in the fall of that year. Regulations for 1915 only were issued in April, 1915. The following regulations were adopted by the Board of Education in November and issued as a circular of information Dec. 1, 1915:—

REGULATIONS REGARDING THE APPROVAL OF HIGH SCHOOLS FOR THE PRIVILEGE OF CERTIFICATION TO STATE NORMAL SCHOOLS.

1. Any public high school will, upon request of the superintendent of schools, be examined by the agents of the Board to determine whether the privilege of certification should be granted. For this purpose blanks furnished by the Board are to be filled out by the superintendent of schools, giving information regarding the enrollment, organization and teaching force of the high school for which approval is sought. When necessary the school will also be visited by an agent of the Board.

2. Approval of any school entitles the school to the privileges of certification for the current year only.

3. Schools will be classified as belonging to Class A or to Class B. To be approved as belonging to Class A the school must, in the opinion of the agents of the Board, substantially meet the requirements given below. To be approved as belonging to Class B the school must, in the opinion of the agents of the Board, be making reasonable progress toward meeting those requirements.

4. But any high school that in 1915 had the privilege of certification to State normal schools, on the ground that it had been approved by the New England College Entrance Certificate Board, will have the privilege of certification to State normal schools temporarily extended for 1916. After 1916 the certificate privilege will be limited to public high schools in Massachusetts approved by the Board of Education. Candidates from schools outside the State will be dealt with on an individual basis.

5. A high school in Class A may¹ certificate² to a State normal school any graduates in subjects in which they have a mark of A or B.

6. A high school in Class B may¹ certificate² to a State normal school only those graduates who are in the upper half³ of the graduating class and have attained a mark of A or B in at least 10 of the 15 units counted toward graduation from high school.

¹ The principal of a high school is expected to certificate to a normal school only such pupils as are, in his judgment, reasonably likely to succeed in the normal school and in teaching.

² The requirements for admission to normal schools are given in a leaflet entitled "Requirements for Admission to Massachusetts Normal Schools." Candidates whose certificates are accepted by the principal of the normal school are exempted from entrance examinations in those subjects in which they have secured in the last year of work in that subject a mark of A or B or a mark upon which the school certificates to colleges in the New England College Entrance Certificate Board.

³ The upper half of a graduating class shall, for this purpose, consist of those pupils who have obtained the highest rank as determined by counting for each pupil in the graduating class the number of units in which he has secured the mark of B increased by twice the number of units in which he has secured the mark of A.

REQUIREMENTS FOR HIGH SCHOOLS IN CLASS A.

To be approved in Class A the high school must, in the opinion of the agents of the Board, substantially meet the requirements given below. If, however, the school has a membership of more than 200 pupils, expended more than \$40 per pupil in the average membership for the salaries and expenses of principal and salaries of teachers, and employs for the most part teachers of experience, then the school *may* be approved in Class A, even if it does not meet certain of these requirements.

Note. — In the following requirements the word “class” means a group of pupils instructed in one subject at one time by one teacher, and the number of pupils in the membership of the school and the number of pupils in each class shall be based upon the membership on October 1 preceding the calendar year for which approval is granted.

1. Exclusive of the principal, the number of teachers in schools with less than 200 pupils shall be such that the ratio of pupils in the membership of the school to teachers does not exceed 25.

In applying this regulation the number of teachers and pupils shall be estimated as follows: —

Each teacher devoting full time to the high school shall be counted as one teacher, even if such teacher conducts either more or less than 25 periods per week of teaching.

Each teacher not devoting full time to the high school shall be counted as a fractional teacher, and such fraction shall be obtained by dividing by 25 the number of periods per week of teaching conducted by that teacher.

In case State-aided vocational departments are maintained in the school, the teacher or teachers in such departments and the pupils taking work only in those departments shall not be counted, but one half of the number of pupils who take the regular work of such departments and also take high school work shall be counted.

Note. — Schools with less than 100 pupils offering commercial courses including stenography and bookkeeping, or other small schools offering a large variety of courses, will find it desirable and often necessary to employ one teacher more than the above rule requires.

2. Not over 50 per cent. of the classes in the school shall contain more than 25 pupils each, and not over 20 per cent. of the classes shall contain more than 30 pupils each. No class of more than 30 pupils shall be instructed by a teacher of less than two years' experience.

3. To insure thoroughness of work and concentration of effort by both pupils and teachers nearly all the courses shall be allotted a class exercise every day. Provision shall be made for one or more double periods in physics, chemistry, household arts and manual training, when offered.

4. Subject to the exceptions mentioned below, no teacher who instructs five classes shall have a sum of more than 125 pupils in these classes; no teacher who instructs six classes shall have a sum of more than 100 pupils

in these classes; and no teacher shall instruct more than six classes. In order to allow the principal time for directing and supervising the work of the teachers, and for conferring with pupils and parents, the maximum number of classes instructed by the principal shall be as follows:—

In a school of more than 300 pupils, not more than 2 classes.

In a school of 201 to 300 pupils, not more than 3 classes.

In a school of 101 to 200 pupils, not more than 4 classes.

In a school of 61 to 100 pupils, not more than 5 classes.

The requirements in this section may be modified, when such modifications appear reasonable to the agents of the Board, in the following cases:—

(1) When a school has an enrollment of fewer than 40 pupils or more than 200 pupils.

(2) When a teacher has classes that recite only one, two, three or four periods per week.

(3) When a teacher conducts general exercises in spelling, penmanship, current events, public speaking or music.

(4) When a teacher supervises typewriting in a class of fewer than 20 pupils.

It is strongly recommended, however, that the number of classes instructed by each teacher should not exceed five.

5. *Marks.*—The scholarship record of pupils shall be kept accurately either on the High School Record Cards prepared by the Board of Education, or on cards containing substantially the same information and approved by the Board.

The marks may be expressed either by the letters A, B, C, D, E, or by numbers on a scale of 100. The following interpretation is established for both numbers and letters:—

A or B, or a mark of 80 or above, means that the teacher considers the work of sufficient value to justify certification to a higher educational institution.

C, or a mark of 70 to 79, means that the teacher, in consideration of the effort and progress of the pupil, allows regular credit toward graduation.

D or E, or a mark of 60 to 69, shall not entitle the pupil to full credit; but a pupil may receive half of the regular credit for work marked D, or 60 to 69, in case the authorities of the school so decide.

In view of the foregoing interpretation it is obvious that marks on a scale of 100 are not percentages and should not be regarded as such.

6. *Requirement for Graduation.*—The requirement for graduation shall be at least 15 units, defined as follows:—

A unit represents a year's study in any subject in a secondary school, constituting approximately one fourth of a full year's work. To count as a unit, the recitation periods shall aggregate approximately 120 sixty-minute hours. Shop or laboratory periods count one half as much as recitation periods. No deduction need be made for the time used in change of classes, if this time does not exceed three minutes.

When a school offers one fourth unit credit each year for courses in manual training, household arts and drawing, in addition to 4 units for other courses, the requirement for graduation in that school should be 16 units.

7. *Pupils' Programs.* — The choice of courses for each pupil shall be made under the advice, and subject to the approval of the principal. A pupil desiring to take either more or less than 4 units of work in one year, if 15 units are required for graduation, or less than 4 or more than $4\frac{1}{4}$ units in one year, if 16 units are required for graduation, shall secure the consent of the principal.

8. Every teacher shall file with the principal a concise record of the work covered in each course, indicating the principal projects or experiments performed. These records shall be available for the information of succeeding teachers and for inspection by agents of the Board.

The following requirements (9 to 19) are general in character, and it shall rest with the agents of the Board to determine whether the school meets these requirements.

9. In selecting courses to be taught in the school, careful consideration shall be given to the needs and plans of all the pupils. The school shall offer to first and second year pupils subjects that will be of definite value to them even if they do not remain more than two years in high school. So far as the finances of the school permit and the demands justify, courses shall be offered in household arts, manual training, commercial subjects, music, drawing, and the usual college preparatory subjects.

10. In selecting teachers, careful consideration shall be given to the subjects that are to be taught and to the specific preparation of candidates. To this end the superintendent of schools and the high school principal shall, before selecting a teacher, decide on the subjects that can be taught most effectively by each teacher in the school and the subjects that a candidate should be qualified to teach.

11. In assigning courses to teachers, effort shall be made to assign to each teacher those subjects that he can teach most effectively.

12. In planning the work in each course, the subject-matter and the methods of instruction shall be carefully chosen with reference to the previous experience, natural mental processes and genuine interests of the pupils in the class. The amount of ground covered shall not be accepted in lieu of thoroughness of instruction or of the adaptation of the work to the needs of the pupils.

13. Each teacher shall give evidence of an earnest attempt to define for his own guidance the values that he expects his pupils to derive from the courses that he teaches. The principal and teachers (and superintendent of schools in towns) shall confer from time to time regarding the main objectives in their work, both in the classroom and in the other activities of the school.

14. The efficiency of the instruction and the general intellectual and moral tone of the school are of prime importance, and consequently the school must stand well in these respects in order to be approved as belonging to Class A.

15. The lighting, heating and ventilating of the rooms and the methods of cleaning shall be such as to insure conditions recognized as hygienic by modern standards.

16. The condition of the school building and its surroundings is an important factor in the influence of the high school. Hence the general appearance of the schoolrooms, halls, buildings and yard, the care of books and supplies, and the condition of the blackboards must receive proper attention.

17. The number and character of classrooms, recitation rooms and laboratories and the equipment of the school shall be such as may reasonably be expected of the town maintaining the high school.

18. Reasonable efforts shall be made to retain for a term of years the services of those teachers who prove their usefulness to the school.

19. The principal of the school and the superintendent of schools shall, in their decision as to pupils that they will or will not recommend to normal schools, show such ability to estimate the qualities of the pupils as to justify the retention of the certification privilege.

The Teaching of Community Civics in High Schools.

In the spring of 1914 Clarence D. Kingsley, agent for high schools, with the assistance of five Massachusetts teachers, organized preliminary material for a manual for high school teachers of community civics. That summer Dr. J. Lynn Barnard, of the Philadelphia School of Pedagogy, who conducted a summer course for teachers of this subject at the Hyannis Normal School, and F. W. Carrier, then principal of

the Wilmington (Massachusetts) High School, who had done significant work in the teaching of this subject, prepared an extensive outline of topics and assisted in the preparation of the manual. The following winter Arthur W. Dunn, specialist in civic education at the United States Bureau of Education, gave many valuable suggestions. The manual was issued in the summer of 1915 by the United States Bureau of Education as Bulletin 23 for 1915, entitled "The Teaching of Community Civics." This Bulletin contains a statement of the aims that should prevail in the teaching of community civics, a discussion of the methods that are necessary in order that these aims may be realized, and detailed suggestions regarding the method of approach to each of the topics in community civics, together with lists of social agencies that are suitable for detailed study by the members of the class. The course in civics outlined in this bulletin differs widely from courses in civics as ordinarily outlined heretofore. In this course the purposes for which the members of a community co-operate through social agencies are discussed before the consideration of the machinery of government. It is believed that this method is effective in the production of good citizenship. Another important departure is that voluntary social agencies are discussed as well as governmental agencies.

The subject of community civics has been introduced in a considerable number of Massachusetts high schools, including some of the largest of these schools. In certain of the schools in which the subject was regarded as experimental last year, it is no longer so regarded.

High School Record Card.

A study of high school record cards showed that these records were often fragmentary, and based upon so many different systems of marking that they were difficult to interpret. This condition was especially unfortunate in the schools in which there were frequent changes in the principalship. Since the designing of a satisfactory form of record by each school would involve a large expenditure of time and thought, and since the printing of different forms for each school would entail need-

less expense, the agent for high schools was authorized to design a record card, so that schools could secure copies of the card from the State printer at a wholesale price.

A sheet giving "Directions for Keeping and Filling Out High School Record Card" was prepared, to be furnished with the card.

One side of the card provides for a record of the scholarship of the pupil for four years. Provision is made, not only for entering the final mark in each subject, but also for a record of the number of periods per week of prepared and unprepared work in that subject, and the number of units of credit allowed for that subject, and for the signature of the teacher. A special space is also provided for the entry of conditions removed. A space is designated for entering the total number of units toward graduation given for the work of the year.

The other side of the card provides for the yearly record of the "educational and vocational outlook" of the pupil.

Provision is also made for a record as to the higher institution attended by the pupil or the kind of work in which he is engaged after leaving the high school.

Salaries and Experience of High School Principals.

The salaries of the 255 principals of public high schools in Massachusetts range from \$4,068 to \$700. Only 12 of these have salaries exceeding \$3,600, while 54 have salaries less than \$1,200.

The number of years' experience as principal or teacher that these 255 principals have had ranges from 47 to 0. Only 25 of these have had less than five years' experience.

Changes in the principalship, in the State as a whole, are too frequent. Forty-seven high schools changed principals in September, 1915; 7 high schools changed principals during the school year 1914-15; 47 high schools changed principals the preceding year. Consequently, there are now 101 high schools, or about two fifths of all the high schools of the State, in which the principal has occupied his present position for less than two years. These changes are, as a rule, due to the fact that

sufficient increments are not made to the salaries of principals to retain those who prove their efficiency.

The connection between low salaries and frequent changes in the principalship, together with the wide discrepancy between salaries in large high schools and those in small high schools, may be seen from the following table, in which the median¹ salary, the median number of years' experience, and the median number of years that the principal occupied his present position previous to September, 1915, are given for each of the four groups of high schools indicated in the table.

HIGH SCHOOLS.	Median salary of high school principal.	Median number of years of experience of principal as principal or teacher previous to September, 1915.	Median number of years principal occupied his present position previous to Sept. 1, 1915.	Median number of pupils in the average membership of these high schools about Oct. 1, 1915.
77 high schools in cities and towns having over 10,000 population.	\$2,800	22	5	725
49 high schools in towns having over 5,000 population but less than 10,000 population.	1,800	14	4	232
67 high schools in towns having 500 families, but less than 5,000 population.	1,400	9	2	93
62 high schools in towns of less than 500 families.	1,100	6	1	48
Total high schools, 255.				

¹ The median in any group of numbers is the middle number when all the numbers in that group are arranged in order of magnitude.

The data regarding each principal in each of the foregoing groups of high schools are given in the following table:—

High school principals for 1915-16, with salaries and number of years' experience.

Group I. — High schools in cities and towns having over 10,000 population.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Adams, . . .	Betts, Herman B., . . .	8	4	\$1,700	207
Arlington, . . .	Clerk, Frederick E., . . .	11	0	2,300	647
Attleboro, . . .	Alexander, William B., . . .	8	0	2,000	433
Boston:—					
Brighton, . . .	Tupper, Frederic A., . . .	34	16	4,068	564
Charlestown, . . .	Evans, George W., . . .	30	10	4,068	556
Commerce, ¹ . . .	Downey, James E., . . .	17	5	3,924	1,656
Dorchester, . . .	Thomas, James E., . . .	36	4	3,780	2,400
East Boston, . . .	Eliot, John F., . . .	42	26	4,068	952
English, ¹ . . .	Snow, William B., . . .	30	0	3,348	2,300
Girls' High, ² . . .	Richardson, Myron W., . . .	25	11	3,924	2,238
Girls' Latin, ² . . .	Hapgood, Ernest G., . . .	14	5	3,924	704
Hyde Park, . . .	Earle, George W., . . .	25	6	3,104	630
Mechanic Arts, ¹ . . .	Parmenter, Charles W., . . .	38	32	4,068	1,245
Practical Arts, ² . . .	Weaver, Herbert S., . . .	32	8	4,068	762
Public Latin, ¹ . . .	Pennypacker, Henry, . . .	27	6	4,068	1,040
Roxbury, ² . . .	Laird, Raymond G., . . .	22	1	3,492	1,142
South Boston, . . .	Gartland, Peter F., . . .	24	1	3,348	1,044
West Roxbury, . . .	Gallagher, Oscar C., . . .	17	1	3,448	812
Beverly, . . .	Hurd, Benjamin S., . . .	37	30	2,500	975
Brockton, . . .	Getchell, Merle S., . . .	23	1	3,000	1,770
Brookline, . . .	Akers, Winfred C., . . .	26	2	3,700	720
Cambridge:—					
High and Latin, . . .	Cleveland, Lellie L., . . .	22	5	3,120	2,270
Rindge Technical, ¹ . . .	Wood, John W., . . .	17	8	3,120	690
Chelsea, . . .	Gammons, Herman, . . .	11	0	2,400	993
Chicopee, . . .	Desmond, Jr., John J., . . .	6	2	2,600	315

¹ For boys.² For girls.

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group I. — High schools in cities and towns having over 10,000 population — Continued.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Clinton, . . .	O'Toole, Lawrence F., . . .	5	2	\$1,800	318
Everett, . . .	Rockwood, Wilbur J., . . .	32	22	2,800	1,048
Fall River: —					
Durfee, . . .	Plummer, Frederic W., . . .	24	3	3,000	810
Technical, . . .	Dooley, William H., . . .	13	2	3,000	800
Fitchburg, . . .	Woodbury, Charles T., . . .	20	12	3,000	1,088
Framingham, . . .	Cushing, Walter H., . . .	22	12	2,400	429
Gardner, . . .	Smith, Mauriee B., . . .	20	4	1,920	419
Gloucester, . . .	Kimball, Elwell F., . . .	15	1	2,300	739
Greenfield, . . .	Jewett, John V., . . .	5	0	1,800	350
Haverhill, . . .	Clow, Arlington I., . . .	10	0	2,400	960
Holyoke, . . .	Conant, Howard, . . .	21	9	3,000	960
Lawrence, . . .	Horne, James D., . . .	28	21	4,000 ¹	1,208
Leominster, . . .	Morse, Kenneth L., . . .	12	1	2,100	558
Lowell, . . .	Irish, Cyrus W., . . .	29	17	3,000	1,777
Lynn: —					
Classical, . . .	Mitchell, Fred C., . . .	15	0	2,700	560
English, . . .	Davis, George F., . . .	10	0	2,850	1,300
Malden, . . .	Jenkins, Thornton, . . .	17	1	2,400	1,190
Marlborough, . . .	MacDougall, William J. B., . . .	10	0	1,800	491
Medford, . . .	Howlett, James D., . . .	13	3	2,700	1,128
Melrose, . . .	Hulsman, Lorne B., . . .	10	4	2,500	720
Methuen, . . .	Adams, Walter S., . . .	7	1	1,600	225
Milford, . . .	FitzGerald, Christopher A., . . .	5	1	1,700	304
New Bedford, . . .	Williams, Walter G., . . .	22	5	3,000	1,100
Newburyport, . . .	Wells, Dana C., . . .	18	1	1,800	497
Newton: —					
High, . . .	Adams, Enoch C., . . .	39	18	3,500	930
Technical, . . .	Palmer, Irving O., . . .	28	5	3,500	675

¹ Includes \$1,000 for managing afternoon session.

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group I. — High schools in cities and towns having over 10,000 population — Concluded.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
North Adams, . .	Gadsby, Herbert H., . .	29	20	\$2,500	486
Northampton, . .	Roote, Clarence B., . .	35	27	1,900	348
Peabody, . . .	Woodman, Willard W., . .	28	15	2,100	501
Pittsfield, . . .	Pratt, Harry E., . . .	10	4	2,500	1,100
Plymouth, . . .	Whiting, William C., . .	33	4	2,100	310
Quincy, . . .	Collins, Ernest L., . . .	17	3	2,500	1,050
Revere, . . .	Morse, Frank P., . . .	23	14	2,350	595
Salem, . . .	Bosshart, John H., . . .	13	2	2,900	1,000
Somerville, . . .	Avery, John A., . . .	24	9	3,200	2,091
Southbridge, . .	Bosworth, Clarence W., . .	6	2	1,700	138
Springfield: —					
Central, . . .	Hill, William C., . . .	20	5	3,600	847
Commerce, . . .	Ellis, Carlos B., . . .	5	5	3,600	851
Technical, . . .	Warner, Charles D., . . .	34	16	3,600 ¹	915
Taunton, . . .	Ware, Fred U., . . .	15	5	2,450	676
Wakefield, . . .	Howe, Charles H., . . .	34	20	2,200	475
Waltham, . . .	Eaton, Willis L., . . .	23	16	2,300	660
Watertown, . . .	Whitney, Frank W., . . .	36	18	2,200	349
Webster, . . .	Lobban, James A., . . .	16	12	2,200	233
Westfield, . . .	Kittredge, Herbert W., . .	35	25	2,600	392
Weymouth, . . .	Hilton, Frederick W., . .	19	4	1,900	371
Winthrop, . . .	Clarke, Edward R., . . .	13	½	2,500	562
Woburn, . . .	Low, George W., . . .	13	7	2,000	584
Worcester: —					
Classical, . . .	Goodwin, Edward R., . . .	39	21	3,200	817
Commerce, . . .	Jackson, Joseph, . . .	47	14	3,200	1,305
North, . . .	Burbank, Charles E., . . .	25	4	3,200	519
South, . . .	Woodward, Edward M., . .	29	12	3,200	725
High schools, 77.	Medians, . . .	22	5	\$2,800	725

¹ Does not include salary as principal of evening high school.

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group II. — High schools in towns having less than 10,000 population and over 5,000 population.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Abington, . . .	Paul, Richard F., . . .	3	½	\$1,600	257
Amesbury, . . .	Brown, Forrest, . . .	22	20	1,800	232
Amherst, . . .	Marshall, Charles W., . . .	27	15	1,800	258
Athol, . . .	Williams, Meredith G., . . .	10	0	1,600	270
Belmont, . . .	Scott, Frank A., . . .	12	5	2,000	300
Blackstone, . . .	Masterson, Vincent P., . . .	11	11	1,075	106
Braintree, . . .	Chapin, Lewis P., . . .	18	5	1,700	255
Bridgewater, . . .	Blake, Harry A., . . .	14	5	2,000	152
Chelmsford: —					
Center, . . .	Holbrook, Charles A., . . .	40	37	1,200	74
North, . . .	Trubey, Arthur W., . . .	20	3	1,200	86
Concord, . . .	Hall, Wells A., . . .	10	8	2,500 ¹	475
Danvers, . . .	Spooner, William A., . . .	5	3	1,800	315
Dedham, . . .	Sprague, William D., . . .	19	2	2,200	375
Easthampton, . . .	Boak, Edward K., . . .	9	6	1,700	216
Easton, . . .	Phipps, Harrie J., . . .	12	4	1,800	280
Fairhaven, . . .	Kimball, Albert B., . . .	26	9	2,200	226
Franklin, . . .	Lamb, Charles B., . . .	8	1	1,400	227
Grafton, . . .	Macklin, Paul M., . . .	8	2	1,750	102
Great Barrington, . . .	Purdum, J. Leslie, . . .	10	4	3,000 ¹	237
Hudson, . . .	Williams, Charles A., . . .	26	18	1,600	255
Ipswich, . . .	Marston, John P., . . .	42	20	1,500	215
Mansfield, . . .	Hadlock, Fred H., . . .	15	9	1,600	145
Marblehead, . . .	Campbell, George P., . . .	15	8	1,800	225
Maynard, . . .	Averill, Porter W., . . .	3	0	1,500	160
Middleborough, . . .	Sampson, Walter, . . .	29	25	2,300	262
Milton, . . .	Curtis, Charles L., . . .	20	4	2,500	316
Montague, . . .	Keating, Joseph S., . . .	10	0	1,800	305
Natick, . . .	Montgomery, Edward L., . . .	17	1	1,850	350

¹ Includes salary as superintendent.

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group II. — High schools in towns having less than 10,000 population and over 5,000 population — Concluded.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Needham, . . .	Hutchinson, Fred W., . . .	16	3	\$2,100	184
North Andover, . . .	Dame, Dana P., . . .	35	4	2,200 ¹	122
North Attleborough, . . .	Peterson, Charles J., . . .	8	1	1,800	220
Northbridge, . . .	Holt, Frank E., . . .	9	3	1,600	173
Norwood, . . .	Cutler, Nathaniel A., . . .	24	16	1,800	255
Orange, . . .	Dexter, Arthur L., . . .	13	3	1,650	190
Palmer, . . .	Hurley, John E., . . .	1	1	1,500	172
Reading, . . .	Safford, Adelbert L., . . .	26	2	2,800	325
Rockland, . . .	Roberts, Alberti, . . .	6	½	1,500	265
Saugus, . . .	Williams, Arthur L., . . .	11	11	1,800	302
Spencer, . . .	Agard, Irving H., . . .	6	0	1,400	119
Stoneham, . . .	Emerson, Charles J., . . .	21	20	2,000	328
Stoughton, . . .	Wyeth, Stimson, . . .	2	½	1,500	154
Swampscott, . . .	Hobbs, Charles W., . . .	15	0	3,000	282
Ware, . . .	Smith, Nathan R., . . .	20	8	1,800	155
Wellesley, . . .	Brown, Seldon L., . . .	36	29	2,500	230
Westborough, . . .	Wallace, B. Holmes, . . .	14	0	2,000 ¹	170
West Springfield, . . .	Worcester, John C., . . .	35	24	2,000	320
Whitman, . . .	Tudbury, Chester W., . . .	12	2	1,800	250
Winchendon, . . .	Boutelle, Arthur M., . . .	14	3	2,000	174
Winchester, . . .	Wixom, Elbert C., . . .	15	6	2,400	400
High schools, 49.	Medians, . . .	14	4	\$1,800	232

¹ Includes salary as superintendent.

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group III. — High schools in towns having less than 5,000 population and having 500 families.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Ayer,	Gleason, Ernest M.,	16	4	\$1,500	110
Barnstable: —					
Cotuit,	Sanderson, Burton W.,	12	3	1,000	20
Hyannis,	Boody, Louis M.,	22	19	1,600	116
Barre,	Swan, Clyde H.,	5	0	1,400	93
Belchertown,	Allen, Thomas,	15	2	1,200	53
Billerica,	Vining, Eugene C.,	17	14	1,800 ¹	107
Bourne,	Lamprey, David C.,	12	8	1,500	60
Brookfield,	Bucknam, Arthur B.,	5	2	1,300	53
Canton,	Cole, Roy E.,	5	3	1,700	207
Chatham,	Parks, Samuel R.,	8	0	1,100	56
Cohasset,	Lary, Stanley C.,	15	12	2,000 ¹	115
Dalton,	Jackman, Ernest D.,	6	1	1,400	112
Dartmouth: —					
Central,	Dolloff, George R.,	2	0	900	22
North,	Churchill, Everett A.,	2	1	1,050	32
South, ²	Anderson, James G.,	1	0	1,000	30
Dennis,	Guild, Charles A.,	29	1	1,100	50
Dudley, ²	Jacobs, Charles F.,	27	1	1,150	24
East Bridgewater,	Nuttø, William J.,	9	3	1,400	125
Falmouth,	Howland, George W.,	11	6	1,500	117
Foxborough,	Burnell, Floyd W.,	7	1	1,500	152
Groton,	Burton, John A.,	11	1	1,350	80
Groveland,	Marston, Harold P.,	4	1	1,200	107
Hanover,	Hall, Wallace S.,	7	0	1,100	67
Hardwick,	Gilbert, William H.,	6	1	1,600	95
Harwich,	Peltier, Louis J.,	3	1	1,050	59
Hingham,	Andrews, Walter E.,	23	1	2,500	220
Holbrook,	Currier, Ralph P.,	7	5	1,300	124

¹ Includes salary as superintendent.

² Not a four-year high school.

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group III. — High schools in towns having less than 5,000 population and having 500 families — Continued.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Holden, . . .	Gray, Claude A., . . .	4	0	\$1,300	95
Holliston, . . .	Maloney, Earle F., . . .	4	2	1,150	78
Hopedale, . . .	Johnson, Arthur C., . . .	20	7	1,750	53
Hopkinton, . . .	Supple, Miss Mary A., . . .	29	14	1,000	81
Kingston, . . .	Merrill, Lee S., . . .	6	4	1,200	71
Lancaster, . . .	Rollins, Arthur S., . . .	5	2	1,400	45
Lee, . . .	Dunham, Herman N., . . .	30	1	1,600	115
Leicester, . . .	Jordan, James L., . . .	7	1	1,400	90
Lenox, . . .	Kane, Thomas F., . . .	8	1	1,600	116
Lexington, . . .	Carver, Arthur H., . . .	13	2	2,500	223
Ludlow, . . .	Gushee, Mrs. Helen M., . . .	27	10	1,100	43
Manchester, . . .	Saben, Aldred L., . . .	22	16	1,550	125
Marshfield, . . .	Fuller, Warren C., . . .	1	0	900	59
Medway, . . .	Williams, Joel C., . . .	4	0	1,100	72
Merrimac, . . .	Putney, Clifton C., . . .	9	2	1,200	91
Millbury, . . .	Keyes, Charles H., . . .	7	2	1,700	160
Nantucket, . . .	Tirrell, Edwin S., . . .	30	2	1,500	125
North Brookfield, . . .	Sibley, Clarence E., . . .	17	1	1,600	92
Norton, . . .	Thibodeau, Earle T., . . .	4	1	1,200	52
Oxford, . . .	Cole, Elijah D., . . .	9	2	1,425	110
Pepperell, . . .	Whitmarsh, Dudley L., . . .	26	2	1,450	105
Provincetown, . . .	Hills, Aubrey F., . . .	5	0	1,200	111
Randolph, . . .	Chapin, Frederick E., . . .	31	18	1,400	161
Rockport, . . .	Woodward, William A., . . .	28	9	1,200	164
Scituate, . . .	Vail, Guy W., . . .	4	2	1,400	95
Sharon, . . .	Ames, Vernon S., . . .	10	2	1,500	75
Somerset, . . .	Curtis, William E., . . .	1	0	1,000	69
South Hadley, . . .	Sylvester, Charles B., . . .	9	2	1,500	150
Sutton, . . .	Schnier, Edwin J., . . .	2	2	900	30

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group III. — High schools in towns having less than 5,000 population and having 500 families — Concluded.

High school.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Templeton, . . .	Nelson, Chesley W., . . .	5	2	\$1,400	126
Townsend, . . .	Ross, Charles J., . . .	22	2	1,200	73
Upton, . . .	Swain, Roy V., . . .	9	1	1,050	73
Uxbridge, . . .	Wentworth, Marshall, . . .	20	3	1,400	99
Walpole, . . .	Stradley, Blan L., . . .	1	0	1,300	240
Wareham, . . .	Savary, Charles P., . . .	10	5	1,400	130
Warren, . . .	Blackburn, Alexander M., . . .	13	0	1,500	138
Wayland, . . .	Moore, William H., . . .	9	4	1,450	70
Westford, . . .	Roudenbush, William C., . . .	17	3	1,500	50
Westport, ¹ . . .	King, Miss Alice J., . . .	6	2	750	14
Williamstown, . . .	Howard, Will R., . . .	28	4	1,500	153
High schools, 67.	Medians, . . .	9	2	\$1,400	93

Group IV. — High schools in towns having less than 500 families.

Ashby, . . .	Pratt, Ernest W., . . .	0	0	\$800	33
Ashfield, . . .	Hemman, Lawrence M., . . .	6	1	1,100	52
Ashland, . . .	Haskell, Charles L., . . .	5	2	1,400	68
Avon, . . .	Snow, Edward H., . . .	1	1	1,050	97
Bernardston, . . .	Phelps, Lyman B., . . .	7	3	1,200	41
Bolton, . . .	Baker, J. Murray, . . .	7	$\frac{1}{2}$	850	15
Brewster, . . .	Strong, William M., . . .	1	0	900	17

¹ Not a four-year high school.

High school principals for 1915-16, with salaries and number of years' experience — Continued.

Group IV. — High schools in towns having less than 500 families — Continued.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Brimfield, . . .	Kenney, George F., . . .	25	9	\$1,600	66
Carver, . . .	Merrifield, Miss Viola L., . .	4	1	1,000	22
Charlemont, . .	Kimball, Philip H., . . .	3	1	1,100	50
Charlton, . . .	Genthner, Sylvan B., . . .	4	0	900	34
Chester, . . .	Morse, Alvin S., . . .	4	1	950	61
Conway, . . .	MacPhail, Andrew H., . . .	1	1	1,000	31
Douglas, . . .	Pierce, Miss Alice M., . . .	6	$\frac{1}{2}$	900	25
Dover, . . .	Bryant, Carl R., . . .	11	2	1,450	39
Duxbury, . . .	Hartford, Alton H., . . .	9	4	1,200	53
Edgartown, . .	Bachelor, John H., . . .	3	1	900	24
Essex, . . .	Grover, Elbridge C., . . .	1	0	900	63
Granby, . . .	Daniels, Earl R. K., . . .	$\frac{1}{2}$	0	850	20
Hadley, . . .	Reed, James P., . . .	5	1	1,500	85
Hamilton, . . .	Mitchell, Nelson S., . . .	11	1	1,200	80
Huntington, . .	Geer, Wayne E., . . .	6	1	950	46
Littleton, . . .	Greenfield, M. Leroy, . . .	6	0	1,100	51
Lunenburg, . .	Harwood, Joseph A., . . .	3	0	1,000	53
Medfield, . . .	Taylor, Ralph W., . . .	4	3	1,500	87
Mendon, . . .	Risley, Charles H., . . .	3	1	900	32
Millis, . . .	Howard, John J., . . .	10	0	1,260	58
Nahant, ¹ . . .	Chester, John D. W., . . .	16	2	1,700 ²	30
New Marlborough, .	Melvin, Harold W., . . .	0	0	700	32
New Salem, . .	Blanchard, Earle H., . . .	1	0	900	24
Northborough, . .	Porter, Frederick W., . . .	1	0	1,150	58
Northfield, . . .	Baillie, Charles R., . . .	0	0	800	91
Norwell, . . .	Kierstead, Fred H., . . .	1	1	1,050	63
Oak Bluffs, . . .	Leonard, Alpha F., . . .	11	0	1,200	25
Orleans, . . .	Stewart, Herbert D., . . .	14	7	1,400	57
Pembroke, . . .	Baker, Miss Mary L., . . .	4	0	800	45

¹ Not a four-year high school.

² Includes salary as superintendent of schools.

High school principals for 1915-16, with salaries and number of years' experience — Concluded.

Group IV. — High schools in towns having less than 500 families — Concluded.

HIGH SCHOOL.	Principal.	Years' experience as principal or teacher previous to September, 1915.	Years as principal of this high school previous to September, 1915.	Salary for 1915-16.	Membership of high school about Oct. 1, 1915.
Petersham, . . .	Orcutt, Leslie W., . . .	2	0	\$1,000	32
Plainville, . . .	Peasley, Charles H., . . .	5	2	1,250	44
Princeton, ¹ . . .	Dickie, Harrison A., . . .	1	0	800	20
Rutland, . . .	Ross, Winfred S., . . .	14	$\frac{1}{2}$	1,100	40
Sandwich, . . .	Kerr, Miss Frances H., . . .	7	0	1,000	48
Sheffield, . . .	Hughes, Richard, . . .	6	2	950	47
Shelburne, . . .	Vose, James W., . . .	15	0	1,500	138
Sherborn, . . .	Hempel, Edward C., . . .	6	2	1,100	32
Shirley, . . .	Hastings, Miss Margreta S., . . .	4	3	1,000	33
Shrewsbury, . . .	Perry, Millard F., . . .	34	6	1,200	62
Southborough, . . .	McSherry, Henry J., . . .	4	3	1,300	70
Sterling, . . .	Alden, Lester F., . . .	7	0	1,150	45
Stockbridge, . . .	Edwards, Miss Grace L., . . .	11	5	1,300	77
Stow, . . .	Simmons, Frederick J., . . .	9	3	1,200	53
Sudbury, . . .	Merrill, Evan W. D., . . .	12	1	1,000	43
Tisbury, . . .	Dunlap, James A., . . .	8	1	1,290	75
Topsfield, . . .	Lyman, Warren B., . . .	6	1	1,300	33
Wellfleet, . . .	Kimball, George E., . . .	6	4	950	45
West Boylston, . . .	Murdock, George F., . . .	26	4	1,400	29
Westminster, . . .	Baker, Lucas Lee, . . .	20	5	900	54
West Newbury, . . .	Page, John C., . . .	7	1	1,200	33
Weston, . . .	Eaton, Charles M., . . .	25	20	2,400 ²	78
Williamsburg, . . .	Larkin, Jr., Edward P., . . .	7	5	1,000	75
Wilmington, . . .	Bates, Horace F., . . .	15	0	1,400	115
Wrentham, . . .	Richert, George D., . . .	4	1	1,200	54
Yarmouth, . . .	Howes, Howard W., . . .	9	5	1,200	49
High schools, 62.	Medians, . . .	6	1	\$1,100	48

¹ Not a four-year high school.

² Includes salary as superintendent of schools.

Certification of Teachers for State-aided High Schools.

Chapter 375 of the Acts of 1911 authorizes the Board of Education to define the requirements for certification of teachers for State-aided high schools,¹ and to grant certificates to eligible candidates.

Three classes of certificates are now granted,² namely, preliminary, permanent and special. The requirements for these certificates were given in the seventy-eighth annual report of the Board, and are also stated in a circular of information.

The following table shows the number of teachers who have been granted certificates up to Dec. 1, 1915:—

	Men.	Women.	Total.
General,	167	420	587
Preliminary,	219	509	728
Special,	45	195	240
Totals,	431	1,124	1,555

¹ There were 46 State-aided high schools in 1914-15.

² A general certificate was granted prior to July 1, 1912, but is no longer issued, as by chapter 375 of the Acts of 1911 applications for this certificate could not be accepted after July 1, 1912.

State Aid for High School Education.

Every town containing 500 families, according to the latest census, State or national, is required by law to maintain a high school, unless specifically exempted by the Board of Education under conditions defined by the Board as provided by chapter 556 of the Acts of 1914. A town containing 500 or more families cannot receive State aid either for the support of its high school, if it maintains one, or for the tuition and transportation of its pupils to other high schools, if it does not maintain one.

If a town of less than 500 families maintains a high school, it may, under conditions stated below, receive an annual grant of \$500; or if such town does not maintain a high school, it may, under conditions stated below, receive reimbursement, in whole or in part, for its expenditures for the tuition and trans-

portation of pupils attending public high schools in other towns or cities.

According to the United States census for 1910, there were 173 towns of less than 500 families. For the year ending June 30, 1915, 60 of these maintained four-year public high schools and 113 did not. Of the 60 towns that maintained four-year high schools, 46 received the \$500 grant. Of the 113 towns that did not maintain four-year high schools, 95 received reimbursement, in whole or in part, for expenditures for high school tuition or transportation or both. Of these 95 towns, there were 37 that received reimbursement in full for both tuition and transportation.

The \$500 grant was established for the purpose of encouraging the strengthening of high schools in towns of less than 500 families. The State, however, now pays only about one fifth or one sixth of the cost of high school education in the case of the 46 towns that received the \$500, while it bears practically the entire cost of high school education in the case of the 37 towns that were reimbursed in full for the tuition and transportation of high school pupils to other high schools.

The total amount of State aid for high school education for the year ending June 30, 1915, was as follows:—

	Number of towns aided.	Number of pupils.	Amount of State aid.	Average per pupil.
High school grant,	46	1,920 ¹	\$23,000 00	\$12.00
Tuition reimbursement,	90	1,486 ²	60,904 70	40.98
Transportation reimbursement,	72	1,428 ²	29,513 37	20.67
Total,	—	—	\$113,418 07	—

¹ Approximate number of pupils who resided in these towns and attended these high schools.

² Number of different pupils.

The Board of Education has submitted a bill providing that towns of less than 500 families may, under certain conditions, receive from the State a larger percentage of the expenditure for high school education than is provided by the \$500 grant.

The conditions under which the high school grant, high school tuition reimbursement, and high school transportation reimbursement are paid by the State, together with lists of the towns receiving such aid for the year ending June 30, 1915, and the amounts paid each year, are given below:—

High School Grant.—Any town of less than 500 families may receive from the State annually the high school grant of \$500, provided—

1. That it maintains a high school approved by the Board of Education.
2. That the high school has at least two teachers, and offers a four years' course of study.
3. That the high school teachers are certified by the State Board of Education.
4. That the valuation of the town per pupil in the average membership of its public schools does not exceed the corresponding ratio for the Commonwealth (\$8,811).

The 46 towns in the following table, having complied with the above conditions of the law, received the \$500 grant for the year ending June 30, 1915. This table also gives the average membership in these schools for each of the last three years, and the membership about Oct. 1, 1915. From this table it may be seen that there is now only 1 school with a membership of less than 20 pupils, and only 7 with a membership of less than 30 pupils, whereas in 1912-13 the average membership in 4 schools was less than 20, and in 15 it was less than 30. Moreover, 30 of these schools now have a membership of more than 40 pupils, and 21 have a membership of more than 50 pupils.

Table giving membership for four years of high schools that received the high school grant in 1915.

HIGH SCHOOL.	AVERAGE MEMBERSHIP.			Membership about Oct. 1, 1915.
	1912-13.	1913-14.	1914-15.	
Ashby,	10	26	33	33
Ashfield,	58	48	39	52
Ashland,	50	54	68	68
Avon,	51	64	75	97
Barnardston,	24	33	29	41
Bolton,	14	12	14	15
Brimfield,	52	68	63	66
Charlemont,	34	28	39	50
Charlton,	24	19	21	34
Chester,	42	41	46	61
Conway,	27 ¹	30	34	31
Douglas,	24	24	24	25
Edgartown,	27	27	23	24
Essex,	64	59	56	63
Granby,	22	16	15	20
Hadley,	43	51	84	85
Huntington,	30	47	50	46
Littleton,	41	45	50	51
Lunenburg,	36	41	39	53
Mendon,	33	30	34	32
Millis,	28	32	48	58
New Marlborough,	15	21	25	32
New Salem,	19	18	22	24
Northborough,	50	39	50	58
Northfield,	63	65	63	91
Norwell,	57	52	48	63
Pembroke,	32	36	35	45
Petersham,	35	46	39	32
Plainville,	43	43	41	44
Rutland,	36	44	41	40
Sandwich,	41	48	49	48
Sheffield,	45	53	48	47
Shelburne,	95	91	104	138
Shirley,	35	31	31	33
Shrewsbury,	43	43	45	62
Southborough,	42	57	59	70
Sterling,	27	30	46	45
Stow,	38	46	47	53
Sudbury,	21	18	28 ¹	28
Wellfleet,	26	29	39	45
West Boylston,	38	36	36	29
Westminster,	27	34	56	54
West Newbury,	33	34	31	33
Williamsburg,	57	59	60	75
Wilmington,	62	77	92	115
Wrentham,	40 ¹	38	31	54
Totals,	1,754	1,883	2,050	2,363

¹ Estimated.

Each of the following 14 towns of less than 500 families maintained four-year high schools, but the valuation of the town per pupil in the average membership of the public schools *exceeded* the corresponding ratio for the Commonwealth (\$8,811), and, therefore, they were not entitled to receive the high school grant.

Brewster,	Medfield,	Tisbury,
Carver,	Oak Bluffs,	Topsfield,
Dover,	Orleans,	Weston,
Duxbury,	Sherborn,	Yarmouth. — 14.
Hamilton,	Stockbridge,	

In the last three years there have been few changes in the list of towns receiving the grant. Brewster and Orleans were dropped in 1913, Sherborn in 1914, and Medfield and Tisbury in 1915, because the valuation of these towns per pupil in the average membership of their public schools exceeded the corresponding ratio for the Commonwealth. Sharon was dropped in 1913, because the number of its families exceeded 500. Wellfleet and Westminster were added in 1913, because they employed two teachers, and Brimfield in 1915, because the academy in that town was made a public high school.

Provision for the high school grant was first made by the Acts of 1902. The grant was \$300. This grant was increased to \$500 by the Acts of 1906. The number of towns that have received this grant each year since its establishment is as follows: —

	Towns.		Towns.
In 1903,	26	In 1910,	45
In 1904,	34	In 1911,	47
In 1905,	36	In 1912,	49
In 1906,	37	In 1913,	48
In 1907,	40	In 1914,	47
In 1908,	44	In 1915,	46
In 1909,	44		

High School Tuition Reimbursement. — Any town of less than 500 families not maintaining a high school must pay tuition for high school instruction in other towns or cities, and the State reimburses the town for such payments for tuition to the extent of one half in case the valuation of the town ex-

ceeds \$1,000,000, or the entire cost in case the valuation does not exceed \$1,000,000, provided —

1. That the high school attended is approved by the Board of Education.

2. That the valuation of the town per pupil in the average membership of its public schools does not exceed the corresponding ratio for the Commonwealth.

For the year ending June 30, 1915, 113 towns of less than 500 families did not maintain four-year high schools.

The following 18 of these towns each had a valuation per pupil in the average membership of its public schools in *excess* of the corresponding ratio for the Commonwealth (\$8,811), and, therefore, they were not entitled to receive State reimbursement for tuition expenditures: —

Bedford,	Hull,	Princeton, ²
Boxford, ¹	Lincoln,	Russell,
Burlington,	Longmeadow,	Tolland,
Chilmark,	Marion, ¹	Wenham,
Gosnold,	Mount Washington,	West Tisbury, ²
Harvard, ¹	Nahant, ²	Westwood. — 18.

The following town presented no claims for reimbursement of tuition expenditures, as the pupils attended an academy in that town: —

Hatfield. — 1.

The following 4 towns presented no claims for reimbursement of tuition expenditures and presumably had no pupils in attendance in high schools: —

Gay Head,	Hancock,
Goshen,	Mattapoisett. — 4.

There were 90 towns that were reimbursed in whole or in part for tuition expenditures. The names of these towns, together with the amount received by each town, are given in the table on pages 249 to 259. Sixteen of these towns were reimbursed for one half cost of tuition, as their valuation exceeded \$1,000,000, and 74 were reimbursed for full cost of tuition, as their valuation did not exceed \$1,000,000.

¹ Pupils in these towns attended academies located therein.

² These towns maintained high schools offering less than four years of instruction.

Provision for State reimbursement of the expenditure for high school tuition was first made by chapter 212 of the Acts of 1895. That act provided for the full reimbursement in the case of a town having less than 500 families and not maintaining a high school, provided that the valuation of the town did not exceed \$500,000.

By chapter 433 of the Acts of 1902 reimbursement, in whole or in part, was extended to all towns having less than 500 families and not maintaining a high school, provided that the valuation of the town for each pupil in the average membership of its public schools did not exceed the corresponding ratio for the Commonwealth. By this act reimbursement was to be in full in case the valuation of the town was less than \$750,000; otherwise, the reimbursement was to be for one half the expenditure. By chapter 537 of the Acts of 1911 these towns receive full reimbursement in case the valuation of the town is less than \$1,000,000; otherwise, the reimbursement is to be for one half the expenditure.

The number of towns that have been reimbursed in whole or in part each year since 1895, when provision for such reimbursement was first made, together with the number of pupils for which such reimbursement was made and the amount of the reimbursement, is shown in the following table:—

Reimbursement for high school tuition.

SCHOOL YEAR.	Number of towns.	Number of pupils.	Amount of reimbursement.
1895, ¹	28	112	\$840 41
1895-96,	38	143	3,873 05
1896-97,	43	219	6,121 72
1897-98,	51	255	7,309 18
1898-99,	59	298	9,436 67
1899-00,	62	347	11,819 53
1900-01,	62	357	12,384 43
1901-02,	62	392	14,675 85
1902-03,	99	996	31,888 27
1903-04,	103	1,099	35,402 84
1904-05,	106	1,194	38,071 95
1905-06,	100	1,077	36,196 67
1906-07,	97	1,061	36,613 94
1907-08,	97	1,114	38,808 43
1908-09,	98	1,130	41,326 20
1909-10,	99	1,177	42,759 03
1910-11,	95	1,200	44,868 89
1911-12,	94	1,257	53,243 79
1912-13,	88	1,113	47,711 09
1913-14,	89	1,292	56,152 29
1914-15,	90	1,486	62,089 70*
Totals,	—	17,319	\$631,593 93

¹ Between April 4 and July 1, 1895.

* Includes \$1,185 paid Southampton for expenses incurred the preceding school year.

High School Transportation Reimbursement. — To encourage high school attendance by pupils residing in towns not maintaining high schools, chapter 396 of the Acts of 1913 provides that every town having less than 500 families but not maintaining a high school shall, "when necessary, provide for the transportation of any child who resides in said town and who, with the previous approval of the school committee of the town, attends the high school of any other town or city, and shall pay for the expense of such transportation a sum not exceeding one dollar and fifty cents per week during the time of actual attendance of such child in the high school."

To encourage towns of less than 500 families not maintaining high schools to make adequate provision for the support of the elementary schools, this act further provides that these towns may be reimbursed from the treasury of the Commonwealth as follows: —

(a) The *entire* amount (not exceeding \$1.50 per week per child) actually expended for transportation under this act, provided that the town "has expended from the proceeds of local taxation for the support of its public schools for the preceding year an amount equal to at least five dollars per thousand of valuation."

(b) *One half* the amount (not exceeding \$1.50 per week per child) actually expended under this act, provided that the town "has expended for the support of its public schools for the preceding year from the proceeds of local taxation an amount not less than four and less than five dollars per thousand dollars of valuation."

(c) No reimbursement in case the town has expended for the support of its public schools less than four dollars per thousand of valuation.

The year ending June 30, 1914, was the first year for which the State under this act reimbursed towns for the expenditure incurred for transportation of high school pupils, and 36 received reimbursement in full and 23 in part that year. For the year ending June 30, 1915 —

47 expended at least \$5 per thousand valuation for the support of their public schools.

46 received full reimbursement.

1 presented no claim.

30 expended \$4 but less than \$5 per thousand valuation for the support of their public schools.

26 received half reimbursement.

4 presented no claim.

36 expended less than \$4 per thousand valuation for the support of their public schools and, hence, were not entitled to reimbursement.

The names of the towns receiving this reimbursement, together with the amounts received by each town, are given in the following table:—

Table showing reimbursements for the school year 1914-15 for high school tuition (under section 3, chapter 42, Revised Laws, as amended by chapter 433, Acts of 1902, and chapter 537, Acts of 1911) and for high school transportation (under chapter 396, Acts of 1913).

NOTE. — In case the town is reimbursed only one half its expenditures for tuition or transportation, the amount of such reimbursement is indicated by an asterisk.

TOWNS.	TOTAL NUMBER OF PUPILS FROM EACH TOWN REIMBURSED FOR EXPENDITURES FOR —		High schools attended.	REIMBURSEMENT FOR TUITION.			REIMBURSEMENT FOR TRANSPORTATION.		Total amount re-imbursed by State for tuition and transportation.
	Tuition.	Transportation.		Number of pupils attending each high school.	Rate per year.	Amounts re-imbursed.	Number of pupils attending each high school.	Amounts re-imbursed.	
Acushnet,	26	23	Fairhaven,	21	\$75 00	\$772 50*	20	\$583 20	\$1,584 75
Alford,	6	6	New Bedford,	5	75 00	108 75*	3	60 50	
Becket,	17	15	Great Barrington,	6	54 00	324 00	6	180 00*	504 00
			Chester,	4	60 00	240 00	3	146 00	1,596 27
			Lee,	1	50 00	50 00	—	—	
			Springfield (Commerce),	3	100 00	145 00	3	74 90	
			Springfield (Technical),	1	100 00	100 00	1	22 77	
			Westfield,	7	50 00	350 00	7	349 10	
			West Springfield,	1	60 00	60 00	1	58 50	
Bedford,	—	41	Concord,	—	—	—	39	405 45	451 05
			Lexington,	—	—	—	2	45 60	
Bellingham,	27	30	Franklin,	14	40 00	280 00*	16	247 30	880 70
			Milford,	13	40 00	227 00*	14	126 40	
Berkley,	17	18	Fall River (Technical),	2	75 00	150 00	2	60 00	1,504 50
			Taunton,	15	60 00	900 00	16	394 50	
Berlin,	26	26	Clinton,	14	58 50	763 50	14	127 25	1,453 25
			Hudson,	12	40 00	480 00	13	112 50	

High school tuition and transportation reimbursements, etc. — Continued.

TOWNS.	TOTAL NUMBER OF PUPILS FROM EACH TOWN REIMBURSED FOR EXPENDITURES FOR —		High schools attended.	REIMBURSEMENT FOR TUITION.			REIMBURSEMENT FOR TRANSPORTATION.		Total amount re-im- bursed by State for tuition and trans- portation.	
	Tuition.	Trans- portation.		Number of pupils attending each high school.	Rate per year.	Amounts re- im- bursed.	Number of pupils attending each high school.	Amounts re- im- bursed.		
Blandford,	9	9	Chester, Huntington, Springfield (Technical), Westfield,	3 1 3 2	\$50 00 60 00 100 00 50 00	\$136 50 60 00 240 00 75 00	3 1 3 2	\$58 25* 30 00* 72 00* 37 50*	\$719 25	
Boxborough,	5	7	Concord, Harvard, Littleton,	4 — 1	80 00 — 40 00	320 00 — 40 00	4 — 1	96 88 46 80 16 50	96 88 46 80 16 50	520 18
Boylston,	19	19	Clinton, Worcester (Commerce), Worcester (North), Worcester (South),	6 5 5 3	58 50 70 00 70 00 70 00	322 50 315 00 350 00 210 00	6 5 5 3	72 23 62 60 91 00 54 60	72 23 62 60 91 00 54 60	1,477 93
Buckland,	32	—	Ashfield,	3	{40 00} {60 00}	75 00*	—	—	—	871 00
Burlington,	—	22	Montague, Shelburne (Falls),	1 28	40 00 60 00	6 00* 790 00*	— —	— —	— —	89 20
Carlisle,	24	26	Woburn, Chelmsford (Center), Concord,	2 22	50 00 80 00	100 00 1,690 20	1 25	60 00 800 52	60 00 800 52	2,650 72
Cheshire,	40	40	Adams,	40	36 00	1,350 00	40	820 50	820 50	2,170 50
Chesterfield,	1	1	Williamsburg,	1	35 00	35 00	1	39 00	39 00	74 00
Clarksburg,	25	—	North Adams,	25	45 00	1,090 00	—	—	—	1,090 00

Colrain,	34	35	Brookline,	-	-	-	1	42 56	3,015 01
			Greenfield,	5	40 00	160 00	5	223 00	
			Shelburne,	29	60 00	1,660 00	29	924 45	
Cunnington,	12	14	Ashfield,	4	{ 40 00 }	200 00	6	286 20	1,358 83
			Dalton,	2	36 00	54 00	2	59 50	
			Northampton,	2	60 00	120 00	2	74 20	
			Springfield (Technical),	4	100 00	400 00	4	164 93	
Dana,	16	18	Athol,	10	40 00	381 00	10	310 54	1,455 29
			Barre,	1	50 00	50 00	1	60 00	
			Medford,	-	-	-	1	9 00	
			Natick,	2	50 00	62 00	2	13 50	
			Petersham,	1	100 00	100 00	1	97 50	
			Springfield (Central),	1	100 00	100 00	1	37 00	
			Springfield (Technical),	2	100 00	200 00	2	114 75	
Dunstable,	14	13	Chelmsford (North),	3	50 00	143 75	3	169 50	1,401 00
			Concord,	5	80 00	400 00	5	206 00	
			Lowell,	1	60 00	60 00	1	56 25	
			Pepperell,	5	38 00	145 00	4	220 50	
Eastham,	15	-	Orleans,	15	50 00	562 50	-	-	562 50
East Longmeadow,	50	51	Springfield (Central),	6	100 00	225 00*	6	49 80	2,770 35
			Springfield (Commerce),	18	100 60	792 50*	18	254 45	
			Springfield (Technical),	26	100 00	1,173 00*	27	273 60	
Egremont,	12	-	Great Barrington,	12	54 00	504 00	-	-	501 00
Enfield,	18	18	Athol,	14	40 00	492 00	14	520 05	1,249 80
			Belchertown,	4	66 30	123 25	4	112 50	
Erving,	25	25	Greenfield,	5	40 00	84 50*	5	52 50*	660 20
			Montague,	15	40 00	200 00*	15	136 00*	
			Orange,	5	40 00	69 50*	5	37 70*	
Florida,	1	-	North Adams,	1	45 00	75 00	-	-	75 00

High school tuition and transportation reimbursements, &c. — Continued.

TOWNS.	TOTAL NUMBER OF PUPILS FROM EACH TOWN REIMBURSED FOR EXPENDITURES FOR —		High schools attended.	REIMBURSEMENT FOR TUITION.			REIMBURSEMENT FOR TRANSPORTATION.		Total amount re-imbursed by State for tuition and transportation.
	Tuition.	Transportation.		Number of pupils attending each high school.	Rate per year.	Amounts re-imbursed.	Number of pupils attending each high school.	Amounts re-imbursed.	
Freetown,	16	17	Fall River (Durfee), Fall River (Technical), Middleborough, . . . New Bedford, . . .	2 4 — 10	\$75 00 75 00 — 75 00	\$75 00* 101 25* — 300 00*	2 4 1 10	\$10 32 54 32 15 00 196 20	\$782 09
Gill,	20	7	Barnardston, Montague, Northfield,	4 15 1	30 00 40 00 45 00	110 25 560 00 45 00	4 2 1	180 00 93 00 60 00	1,048 25
Granville,	14	11	Springfield (Commerce), Westfield,	2 12	100 00 50 00	200 00 510 00	2 9	84 00 444 00	1,238 60
Greenwich,	7	—	Athol, Springfield (Technical),	5 2	40 00 100 00	178 00 145 00	— —	— —	323 00
Halifax,	18	18	Bridgewater, . . . Brookton, Kingston, Middleborough, . . . Whitman,	8 1 5 1 3	50 00 80 00 45 00 55 00 40 00	400 00 80 00 225 00 55 00 120 00	8 1 5 1 3	240 00* 30 00* 130 00* 30 00* 72 00*	1,382 00
Hampden,	10	10	Springfield (Central), Springfield (Commerce), Springfield (Technical),	3 5 2	100 00 100 00 100 00	300 00 450 00 200 00	3 5 2	86 40* 131 40* 61 50*	1,229 30
Hawley,	3	2	Charlemont,	3	45 00	135 00	2	110 40	245 40
Heath,	6	6	Charlemont,	6	45 00	270 00	6	360 00	630 00
Hinsdale,	29	29	Dalton, Pittsfield,	1 28	26 00 50 00	36 00 1,325 00	— 29	— 603 30	1,964 30

[illegible]

High school tuition and transportation reimbursements, etc. — Continued.

TOWNS.	TOTAL NUMBER OF PUPILS FROM EACH TOWN REIMBURSED FOR EXPENDITURES FOR —		High schools attended.	REIMBURSEMENT FOR TUITION.			REIMBURSEMENT FOR TRANSPORTATION.		Total amount re-imbursed by State for tuition and transportation.
	Tuition.	Transportation.		Number of pupils attending each high school.	Rate per year.	Amounts re-imbursed.	Number of pupils attending each high school.	Amounts re-imbursed.	
Montgomery,	5	—	Huntington, Westfield,	2 3	\$50 00 50 00	\$75 00 150 00	— —	— —	\$325 00
New Ashford,	1	—	Pittsfield,	1	50 00	50 00	—	—	50 00
New Braintree,	17	15	Hardwick, North Brookfield,	16 1	50 00 40 00	752 50 40 00	14 1	\$329 50* 29 25*	1,151 25
Newbury,	7	21	Newburyport,	7	65 00	163 37*	21	114 75*	283 12
Norfolk,	25	25	Franklin, Walpole,	10 15	40 00 50 00	200 00* 364 38*	10 15	90 00* 142 60*	796 98
North Reading,	40	40	Reading,	40	{ 50 00 } { 60 00 }	2,093 00	40	144 50*	2,237 50
Oakham,	18	18	Barre, Hardwick, Holden, North Brookfield,	11 3 1 3	50 00 50 00 50 00 40 00	446 25 150 00 50 00 120 00	11 3 1 3	529 50 119 50 60 00 173 70	1,678 95
Otis,	4	3	Lee, Pittsfield,	3 1	50 00 50 00	150 00 50 00	2 1	60 00* 5 25*	265 25
Paxton,	15	18	Leicester, Spencer, Worcester (Classical), Worcester (Commerce),	1 1 2 12	50 00 — 70 00 70 00	50 00 — 140 00 805 00	1 1 2 14	30 00* 30 00* 59 70* 244 70*	1,459 40

Pelham,	7	-	Anherst,	7	35 00	245 00	-	245 00
Peru,	3	-	Dalton,	2	36 00	72 00	-	122 00
Phillipston,	17	17	Fitsfield,	1	50 00	50 00	-	864 13
Plainfield,	2	2	Athol,	16	40 00	640 00	208 13*	130 00
Plympton,	11	-	Templeton,	1	40 00	13 00	3 00*	487 00
Prescott,	2	-	Northampton,	2	60 00	120 00	60 00*	150 00
Raynham,	40	41	Carver,	2	40 00	80 00	-	2,775 20
Rehoboth,	26	26	Kingston,	3	45 00	120 00	-	1,521 54
Richmond,	16	17	Middleborough,	3	55 00	165 00	-	918 60
Rochester,	17	16	Plymouth,	1	50 00	50 00	-	870 47
Rowe,	4	-	Whitman,	2	40 00	72 00	-	1,532 50
Rowley,	63	-	Hardwick,	1	50 00	50 00	-	-
			Springfield (Central),	1	100 00	100 00	-	-
			Bridgewater,	1	50 00	50 00	-	-
			Brockton,	6	80 00	332 00	12 00	-
			Easton,	-	-	-	133 00	-
			Taunton,	33	60 00	1,803 10	1 00	-
			Attleboro,	3	60 00	90 00*	378 10	-
			Fall River (Technical),	8	75 00	300 00*	42 85	-
			Taunton,	15	60 00	405 00*	302 54	-
			Pittsfield,	16	50 00	650 00	381 15	-
			Fairhaven,	11	75 00	332 50*	268 60	-
			Middleborough,	2	55 00	55 00*	291 97*	-
			Wareham,	4	45 00	90 00*	30 00*	-
			Charlmont,	1	45 00	45 00	21 00*	-
			North Adams,	3	45 00	135 00	-	-
			Ipswich,	52	50 00	1,175 00*	-	-
			Newburyport,	11	65 00	337 50*	-	-

High school tuition and transportation reimbursements, etc. — Continued.

TOWNS.	TOTAL NUMBER OF PUPILS FROM EACH TOWN REIMBURSED FOR EXPENDITURES FOR —		High schools attended.	REIMBURSEMENT FOR TUITION.			REIMBURSEMENT FOR TRANSPORTATION.		Total amount re-imbursed by State for tuition and transportation.	
	Tuition.	Transportation.		Number of pupils attending each high school.	Rate per year.	Amounts re-imbursed.	Number of pupils attending each high school.	Amounts re-imbursed.		
Royalston,	9	11	Athol, . . . . .	.	1	\$40 00	\$40 00	1	\$60 00	\$733 20
			Fitchburg, . . . . .	.	—	—	—	1	4 90	
			Gardner, . . . . .	.	4	40 00	148 00	4	130 80	
			Orange, . . . . .	.	—	—	—	1	6 00	
			Templeton, . . . . .	.	2	40 00	80 00	2	78 00	
			Winchendon, . . . . .	.	2	{ 25 00 } { 40 00 }	70 00	2	115 50	
Russell,	—	13	Huntington, . . . . .	.	—	—	—	6	28 38*	103 88
			Westfield, . . . . .	.	—	—	—	7	75 50*	
Salisbury,	23	36	Amesbury, . . . . .	.	3	50 00	75 00*	3	15 00*	817 76
			Merrimac, . . . . .	.	5	40 00	100 00*	5	85 00*	
			Newburyport, . . . . .	.	15	65 00	414 13*	25	128 63*	
Sandisfield,	3	2	Great Barrington, . . . . .	.	1	54 00	54 00	1	25 00*	182 75
			Lee, . . . . .	.	2	50 00	100 00	1	3 75*	
Savoy,	2	2	Adams, . . . . .	.	2	36 00	63 70	2	96 00	159 70
Shutesbury,	2	—	Greenfield, . . . . .	.	2	40 00	60 00	—	—	60 00
Southampton,	21	17	Easthampton, . . . . .	.	20	50 00	917 50	16	142 13*	1,115 93
			Westfield, . . . . .	.	1	50 00	50 00	1	6 30*	
Southwick,	8	7	Springfield (Central), . . . . .	.	1	100 00	80 00	1	60 00	850 00
			Springfield (Technical), . . . . .	.	1	100 00	80 00	1	60 00	
			Westfield, . . . . .	.	6	50 00	270 00	5	300 00	

Sturbridge, . . .	24	23	Brimfield, Southbridge, . . .	21	30 00 30 00	591 00 90 00	21	496 00 34 00	1,211 00
Sunderland, . . .	29	31	Amherst, Greenfield, . . . Hadley, . . . Northampton, . . .	27 1 — 1	25 00 40 00 40 00 60 00	875 40 40 00 40 00 60 00	27 1 2 1	520 94 34 22 20 34 43 55	1,538 45
Tewksbury, . . .	56	56	Lowell, Wilmington, . . .	54 2	60 00 50 00	1,523 62* 21 25*	54 2	509 15 6 45	2,060 47
Truro, . . .	5	5	Provincetown, . . . Wentfleet, . . .	2 3	40 00 40 00	54 00 100 00	2 3	81 00 150 00	355 00
Tyngsborough, . . .	22	19	Chelmsford (North), Lowell, . . . Westford, . . .	1 19 2	50 00 60 00 50 00	50 00 1,046 32 100 00	— 19 —	— 292 25 —	1,438 57
Tyringham, . . .	6	—	Lee, . . .	6	50 00	255 00	—	—	255 00
Wales, . . .	6	6	Brimfield, . . .	6	30 00	180 00	6	150 00*	330 00
Warwick, . . .	12	12	Orange, . . .	12	40 00	460 00	12	631 00	1,141 00
Washington, . . .	2	—	Chester, . . .	2	60 00	72 00	—	—	72 00
Wendell, . . .	2	—	Orange, . . .	2	40 00	49 00	—	—	49 00
West Brookfield, . . .	46	44	Hardwick, . . . Ware, . . . Warren, . . . Worcester (Classical), . . .	2 2 41 1	50 00 40 00 40 00 70 00	100 00 60 00 1,356 00 70 00	— 2 41 1	— 15 00 416 80 48 00	2,065 80
Westhampton, . . .	2	—	Easthampton, Northampton, . . .	1 1	50 00 60 00	50 00 60 00	— —	— —	110 00
West Stockbridge, . . .	34	35	Great Barrington, Pittsfield, . . . Stockbridge, . . .	14 19 1	54 00 50 00 38 00	720 00 950 00 38 00	14 20 1	352 45 803 45 8 50	2,932 40

High school tuition and transportation reimbursements, etc. — Concluded.

TOWNS.	TOTAL NUMBER OF PUPILS FROM EACH TOWN REIMBURSED FOR EXPENDITURES FOR —		High schools attended.	REIMBURSEMENT FOR TUITION.			REIMBURSEMENT FOR TRANSPORTATION.		Total amount re-imbursed by State for tuition and transportation.
	Tuition.	Transportation.		Number of pupils attending each high school.	Rate per year.	Amounts re-imbursed.	Number of pupils attending each high school.	Amounts re-imbursed.	
West Tisbury, . . .	-	3	Tisbury, . . .	-	-	-	3	\$58 75*	\$58 75
Whately, . . .	8	9	Amherst, . . .	1	\$35 00	\$35 00	1	30 00*	622 22
			Northampton, . . .	5	60 00	300 00	6	67 72*	
			Springfield (Technical), . . .	1	100 00	100 00	1	24 50*	
			Williamsburg, . . .	1	35 00	35 00	1	30 00*	
Wilbraham, . . .	29	29	Ludlow, . . .	1	40 00	14 50*	1	42 60	2,139 42
			Springfield (Central), . . .	3	100 00	150 00*	3	48 00	
			Springfield (Commerce), . . .	9	100 00	442 50*	9	245 00	
			Springfield (Technical), . . .	16	100 00	770 00*	16	426 82	
Windsor, . . .	7	7	Adams, . . .	2	36 00	72 00	2	120 00	672 00
			Dalton, . . .	5	36 00	180 00	5	300 00	
Worthington, . . .	11	12	Chelsea, . . .	1	65 00	65 00	1	60 00	1,231 30
			Dalton, . . .	1	36 00	18 00	1	24 00	
			Huntington, . . .	2	60 00	72 00	2	180 00	
			Northampton, . . .	4	60 00	240 00	5	231 90	
			Springfield (Central), . . .	1	100 00	100 00	1	30 50	
			Springfield (Technical), . . .	1	100 00	100 00	1	56 90	
			Williamsburg, . . .	1	35 00	35 00	1	18 00	
Totals (65 towns), ¹ .	1,486	1,428	88 Schools, . . .	1,486	\$52 52 ²	\$60,904 70	1,428	\$29,513 37	\$90,418 07

² Average rate charged.

¹ Ninety towns, tuition; 72 towns, transportation.

Reimbursements for High School Expenditures incurred during School Year 1913-14.

The following reimbursements were made by the State during the year ending Nov. 30, 1915, for expenditures for high school tuition and high school transportation incurred during the school year 1913-14: —

A. Reimbursement of high school tuition: —	
Southampton was reimbursed in full for tuition expenditures for 23 pupils (21 in Easthampton High School; 2 in Westfield High School),	\$1,185 00
B. Reimbursement of high school transportation: —	
Bellingham was reimbursed for one half of its transportation expenditures for 26 pupils (11 in Franklin High School; 15 in Milford High School),	286 65
Enfield was reimbursed in full for transportation expenditures for 22 pupils (19 in Athol High School; 3 in Belchertown High School),	789 91
Southampton was reimbursed for one half of its transportation expenditures for 22 pupils (20 in Easthampton High School; 2 in Westfield High School),	180 08
C. Reimbursement of high school transportation, specially authorized by chapter 32, Resolves of 1915: —	
Sturbridge was reimbursed in full for transportation expenditures for 25 pupils attending Hitchcock Free Academy, Brimfield,	484 20
Total,	\$2,925 84

IV. REGISTRATION OF TEACHERS.

Statistics for the Year 1915.

The results of the year show a considerable increase in the number of teachers registered, in the number placed, and also in the total salaries received by these teachers.

Teachers registered.

	Nov. 30, 1913.	Nov. 30, 1914.	Nov. 30, 1915.
High school teachers,	142	380	659
Elementary school teachers,	149	503	924
Special teachers,	73	216	341
Totals,	364	1,099	1,924

Positions filled.

	From October, 1912, to Nov. 30, 1913.	From Nov. 30, 1913, to Nov. 30, 1914.	From Nov. 30, 1914, to Nov. 30, 1915.
Superintendents of schools,	3	3	13
High school principals,	9	4	13
Elementary school principals,	2	1	10
High school teachers,	27	40	57
Elementary school teachers,	52	136	135
Special positions,	8	43	74
Totals,	101	227	302

Estimated total salaries of teachers placed, 1914,	\$140,000 ¹
Estimated total salaries of teachers placed, 1915,	\$220,000 ¹
Total number of towns and cities in which teachers have been placed, 1914,	112
Total number of towns and cities in which teachers have been placed, 1915,	168

Teachers registered with the Bureau are being sought for many higher salaried positions than has been the case in previous years. This confirms a prediction previously made, — that the Bureau would render its best service to teachers by registering them early in their teaching career, keeping in communication with them, and helping them to secure better places as their development warrants. Thirty-two teachers have secured regular positions more than once through the Bureau.

Statistics for the current year are not available, but the total number of changes in the Massachusetts teaching force is probably not less than the number for the school year 1914-15. In that year 1,364 teachers new to Massachusetts schools were employed in the State, outside the city of Boston. This takes no account of the changes in teachers caused by moving from one community to another. A conservative statement would be that there were from 1,500 to 1,700 changes in the teaching force of the State outside Boston. No information is available as to how many of these teachers obtained positions without the services of any teachers' agency. Many teachers obtain

¹ Returns not entirely complete.

positions through normal schools¹ and college appointment bureaus, through acquaintance in their home towns, through the examination systems of some cities, and in a variety of other ways.

Advisory Committee on Teachers' Registration Bureau.

Under date of Dec. 7, 1914, the commissioner wrote to five superintendents of schools a letter, in which he said:—

The time has arrived when I would like to have for this Bureau the constructive advice of a few representative superintendents of schools. I am therefore asking if you will be one of a committee of five to act for the next year, commencing January 1, as an advisory committee to the Bureau of registration. I shall undertake that early in your service, Mr. Hamilton shall see you and talk over matters with you, and that perhaps once or twice in the course of the year you will be called, together with Mr. Hamilton and myself and possibly some members of the Board of Education, in order that we may discuss past progress and future policies. It is my desire that this committee shall be so composed that one member shall represent a large city, one a small city, one a large town, one a small town, and one a union superintendency.

The five superintendents addressed accepted the invitation, and the membership of the committee is made up as follows:—

J. H. Van Sickle, Springfield; I. F. Hall, North Adams; E. W. Robinson, Webster; B. J. Merriam, Marblehead; C. L. Randall, Dracut Union.

This committee has had one meeting and discussed several propositions set forth in a memorandum previously submitted by Mr. Hamilton. Several suggestions of value in carrying out the work resulted. Advice on specific points of practice has been obtained from the members of the committee by subsequent correspondence. It is expected that other meetings will be held during the forthcoming year.

Co-operation with College Appointment Bureaus.

During the year a letter based upon the following statement was sent to the several colleges in Massachusetts:—

¹ Out of 825 graduates of Massachusetts normal schools 339 obtained positions through these schools.

During the current school year the attention of agents of the Board has been called to the work of college appointment bureaus in supplying teachers. As investigation shows that most of the Massachusetts colleges are prepared to render valuable service, it has seemed advisable to direct the attention of superintendents to the service of these bureaus.

Inquiry among superintendents has brought out the fact that several have never been apprised of the complete arrangements a number of colleges have for registering and following up the work of their graduates engaged in teaching. To the end of promoting a more complete understanding between these appointment bureaus and Massachusetts superintendents, officials in all Massachusetts colleges were asked to prepare a statement for the News Bulletin.

Replies were received from officials of Boston University, Clark College, Harvard University, Jackson College, Massachusetts Agricultural College, Mt. Holyoke College, Radcliffe College, Simmons College, Tufts College and Wellesley College.

These statements were edited and published in the April, 1915, News Bulletin issued by the Board of Education. This publication is sent to the superintendents of schools, high school principals, chairmen of school committees, and others throughout the State.

The agent in charge of the Bureau visited the following colleges during the year, and addressed members of the senior classes taking educational work: Boston University, Clark College, Jackson College, Massachusetts Agricultural College, Mt. Holyoke College, Radcliffe College, Simmons College, Smith College, and Wellesley College. In these addresses he discussed fully the work of the Registration Bureau, and also the requirements of the Massachusetts Board of Education regarding certification of teachers. As a result of these efforts, members of the graduating classes registered with the Bureau in larger numbers than in any previous year.

State Teachers' Employment Bureaus in Other States.

Under date of Nov. 2, 1914, the United States Department of Education issued a circular in which it stated:

(a) Three States have special laws establishing State Teachers' Employment Bureaus: Massachusetts, Minnesota, Michigan.

(b) Three State departments of education maintain employment

bureaus without special State laws authorizing them: Connecticut, New Jersey, Indiana.

(c) Informal lists of teachers are kept in other State educational departments for the use of inquiry of employers: Louisiana, Maryland.

The New Hampshire Legislature of 1915 passed a special enactment authorizing the State superintendent to conduct a teachers' employment bureau.

The circular issued by the United States Department of Education points out that the two most successful of these agencies are Minnesota and Massachusetts.

The 1915 statistics are not yet available from Minnesota, but under date of Oct. 15, 1914, that bureau reported as follows:—

Teachers registered between June 23, 1913, and Oct. 1, 1914,	.	.	940
Teachers placed between June 23, 1913, and Oct. 1, 1914,	.	.	584
Salaries of teachers placed,	.	.	\$365,965

The manager of the Minnesota Bureau assures the writer that the totals for the current year will be much larger than for the preceding year.

Correspondence with officials in New Jersey and Connecticut indicates that these departments are ready to assume larger responsibilities in the matter of placing teachers whenever the employers of teachers are ready to support the policy and the legislatures are ready to appropriate the necessary funds.

V. SUPERINTENDENTS OF SCHOOLS.

Certification of Superintendents of Schools.

The Board of Education, as required by chapter 215 of the Acts of 1904, determines by examination or otherwise the qualifications of candidates for the position of superintendent of schools in a union.

In accordance with the above provision of law, the Board now issues preliminary and permanent certificates of eligibility to appointment to a position as superintendent of schools in a union.

(*Term Certificate.*—Prior to July 1, 1913, a Term certificate, valid for one, three or five years, was granted by the Board of Education. This certificate is continued in force, but is available only for persons who secured certification as superintendents of schools in unions prior to July 1, 1913. The Term certificate is renewable at the pleasure of the Board of Education.)

1. PRELIMINARY CERTIFICATE.

The *Preliminary certificate*, valid for three years,¹ is granted either on (a) examination, or (b) credentials. (Heretofore the Preliminary certificate could be secured only by examination.)

(a) Requirements for Certification by Examination.

1. *Education*. — Completion of a college or normal school course, or the equivalent.

2. *Professional Training*. — Familiarity with educational theory, practice and history, and with the school law of Massachusetts, as shown by oral examination.

3. *Experience*. — A record of at least two years' satisfactory teaching or supervision, or both.

4. *Examination*. — The candidate must pass an examination in the following subjects: —

School laws of Massachusetts.

School organization, administration and supervision.

Aims, courses and methods in elementary schools, with especial reference to rural schools.

Aims, courses and methods in high schools.

History of education and educational sociology.

(b) Requirements for Certification on Credentials.

1. *Academic*. — A normal school diploma, or bachelor's degree, or equivalent education.

2. *Experience*. — At least three years' experience as a superintendent of schools, the successful character of which shall be established by evidence acceptable to the Board of Education.

3. *Professional Study*. — Completion of courses in an approved college or university equivalent in amount to at least nine year hours work, including the subjects of school administration and supervision, and educational theory and practice. The candidate is also to present a thesis² on some phase of the work of a superintendent of schools. This thesis should show that the applicant has an understanding of the problems of the superintendent of schools.

4. Such further evidence as the Board may require to establish that the candidate is possessed of the personal and professional qualifications requisite for a superintendent of schools.

¹ The three years shall date from the time the holder of the certificate enters on his work as a superintendent of schools in Massachusetts.

² A special study or thesis equivalent to the thesis required for a master's degree, already prepared in a college course in education, may be accepted in lieu of this requirement.

Each candidate for a Preliminary certificate will be given an oral examination to determine his general qualifications and special equipment for the work of a superintendent of schools.

2. PERMANENT (LIFE) CERTIFICATE.

A *Permanent (life) certificate* shall be granted to any superintendent of schools in service in Massachusetts who meets all the following conditions:—

1. *Prior Certification.*—The holding of a superintendent's Term or Preliminary certificate, granted by the Board of Education.

2. *Experience.*—Successful service as a superintendent of schools in Massachusetts for at least three continuous years subsequent to securing a Term or Preliminary certificate. The Board of Education may require a report on the work of the applicant from representatives of the Board.

3. *Professional Study and Training.*—(a) Completion of studies in educational theory equivalent to a semester course.¹ This requirement may be met by attendance on regular courses, including those of summer sessions, in an approved institution, namely, college, university or normal school.

(b) Presentation of a thesis on some topic in school supervision, school organization or management. This paper is to be based on a knowledge of actual school conditions, must be satisfactory to the Board of Education, and is to be prepared after the applicant has secured his Term or Preliminary certificate. It is desirable that the thesis should be written after some experience in supervision.

3. REVOCATION OF CERTIFICATE.

The Board of Education reserves the right to revoke any certificate when, after investigation, it is convinced that the holder thereof is incompetent or is otherwise manifestly unfitted to serve as a superintendent of schools.

The results of the qualifying examination of superintendents of schools for each year are as follows:—

¹ A semester course consists of three exercises per week for a term of eighteen to twenty weeks. Two courses in any approved summer school of at least five weeks' session shall be considered equivalent to a semester course.

YEAR.	Number certificated.	YEAR.	Number certificated.
1904,	7	1910,	19
1905,	14	1911,	7
1906,	23	1912,	21
1907,	15	1913,	15
1908,	10	1914,	14
1909,	21	1915,	9

The classes of certificates held are as follows:—

Permanent certificate,	1
Preliminary certificate,	30
Term certificate,	145

List of Superintendents of Schools, alphabetically arranged, with their Superintendencies.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Abbott, Winthrop P., . . .	\$2,300	Greenfield, . . .	Greenfield.
Aldrich, George I., . . .	4,520	Brookline, . . .	Brookline.
Allen, Herbert L., . . .	1,800	Dalton, . . .	Dalton.
Allison, J. Francis, . . .	2,100	Andover, . . .	Andover.
Andrew, William W., . . .	2,950	Salem, . . .	Salem.
Anthony, John C., . . .	3,000	Melrose, . . .	Melrose.
Armstrong, George P., . . .	2,500	Belmont, . . .	Belmont, Burlington.
Atwell, Francello G., . . .	2,000	Hopedale, . . .	Bellingham, Hopedale, Mendon.
Atwell, Willard B., . . .	2,300	Wakefield, . . .	Wakefield.
Bagnall, Francis A., . . .	2,500	Adams, . . .	Adams.
Bales, Harold C., . . .	1,500	Granville, . . .	Granville, Sandisfield, Southwick, Tolland.
Barbour, Albert L., . . .	3,500	Quincy, . . .	Quincy.
Bartlett, Elwin I., ¹ . . .	2,000	Spencer, . . .	Spencer.
Bates, Charles H., . . .	2,200	Middleborough, . . .	Middleborough.
Belisle, Hector L., . . .	3,500	Fall River, . . .	Fall River.
Bemis, George M., . . .	2,550	Revere, . . .	Revere.
Benedict, Frank H., . . .	1,650	Cochituate, . . .	Dover, Sudbury, Wayland.
Bennett, Robert K., . . .	1,800	Stoughton, . . .	Stoughton.
Blodgett, Samuel F., . . .	1,700	Randolph, . . .	Avon, Holbrook, Randolph.
Bowman, Mortimer H., . . .	1,700	Dighton, . . .	Berkley, Dighton, Rehoboth.

¹ Also teacher in high school.

List of superintendents of schools, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Bragdon, Frederick E., .	\$1,500	West Brookfield, .	New Braintree, Sturbridge, West Brookfield.
Bragg, Mabel C., Ass't, .	2,200	Newtonville, .	Newton.
Bramhall, Robert I., .	1,700	Holden, . . .	Holden, Oakham, Paxton, Rutland.
Brick, Francis S., . .	2,000	Turners Falls, . .	Montague.
Brooks, John D., . .	2,300	Gloucester, . .	Gloucester.
Burke, Jeremiah E., Ass't,	5,496	Boston, . . .	Boston.
Carr, Ernest P., . .	2,100	Marlborough, . .	Marlborough.
Carver, Arthur H., ¹ . .	2,500	Lexington, . .	Lexington.
Caswell, Almorin O., .	2,100	Milford, . . .	Milford.
Chace, Seth Howard, .	2,700	Beverly, . . .	Beverly.
Chaffin, W. E., . . .	1,900	Scituate, . . .	Duxbury, Marshfield, Scituate.
Chalmers, James, . .	3,000	Fitchburg, . .	Fitchburg.
Chester, J. D. W., ¹ . .	1,700	Nahant, . . .	Nahant.
Chidester, Albert J., .	1,700	Warren, . . .	Holland, Wales, Warren.
Churchill, Samuel B., .	1,800	Stockbridge, . .	Stockbridge.
Clapp, George I., . .	2,200	Woburn, . . .	Woburn.
Clark, Charles S., . .	3,500	Somerville, . .	Somerville.
Clarke, George B., . .	1,600	Leicester, . . .	Charlton, Leicester.
Cobb, E. Schuyler, . .	2,000	Winchendon, . .	Ashburnham, Winchendon.
Coe, George A., . . .	1,500	Kingston, . . .	Halifax, Kingston, Pembroke, Plympton.
Coggins, William L., .	1,800	95 Rotch Street, New Bedford.	Freetown, Gosnold, Westport.
Cole, Albert S., . . .	1,900	Barre, . . .	Barre, Hardwick, Petersham.
Congdon, F. K., . . .	3,000	Northampton, . .	Northampton.
Corbin, F. E., ¹ . . .	2,250	Southbridge, . .	Southbridge.
Cox, George W., . . .	2,000	Ware, . . .	Ware.
Crowell, Charles A., Jr., .	2,000	Vineyard Haven, .	Chilmark, Edgartown, Gay Head, Oak Bluffs, Tisbury, West Tisbury.
Cummings, Leslie O., .	2,000	Franklin, . . .	Franklin, Wrentham.
Dame, Dana P., ¹ . . .	2,200	North Andover, . .	North Andover.
Davis, John C., . . .	2,000	Canton, . . .	Canton.
Davison, Frank P., . .	1,500	Charlemont, . .	Charlemont, Hawley, Heath, Rowe.
De Coudres, Thomas H., .	1,900	Grafton, . . .	Grafton, Upton.
DeMeyer, John E., . .	2,200	Abington, . . .	Abington, Bridgewater.
Dempsey, Clarence H., .	3,500	Haverhill, . . .	Haverhill.
Douglas, Frank A., ² . .	2,700	Winthrop, . . .	Winthrop.
Drown, Carroll H., . .	1,850	West Medway, . .	Holliston, Medway, Sherborn.

¹ Also principal of high school.² Also principal of grammar school.

List of superintendents of schools, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Dyer, Franklin B., . . .	\$10,000	Boston, . . .	Boston.
Eaton, Charles M., ¹ . . .	2,400	Weston, . . .	Weston.
Eldredge, William F., . .	1,400	Rockport, . . .	Rockport.
Evans, Osmon C., . . .	1,500	115 Lincoln Street, Worcester.	Auburn, Sutton.
Fales, Lewis A., . . .	2,400	Attleboro, . . .	Attleboro.
Farley, George L., . . .	3,750	Brockton, . . .	Brockton.
Fausey, John R., . . .	2,300	West Springfield, . .	West Springfield.
Fellows, Ernest W., . . .	2,700	Framingham, . . .	Framingham.
Ferguson, Chauncey C., .	2,100	Millbury, . . .	Millbury, Oxford.
Fisher, C. Edward, . . .	2,600	Westfield, . . .	Westfield.
Fitts, Edward P., . . .	1,580	Mansfield, . . .	Hamilton, Mansfield, Sharon.
Fittz, Austin H., . . .	2,200	Norwood, . . .	Norwood.
Fitzgerald, Michael E., .	5,000	Cambridge, . . .	Cambridge.
Fuller, Robert J., . . .	2,200	North Attleborough,	North Attleborough.
Galger, George H., . . .	1,800	Hyannis, . . .	Barnstable.
Gardner, Harry E., . . .	1,600	Hinsdale, . . .	Hinsdale, Peru, Washington, Windsor.
Gibbons, Thomas F., . . .	2,100	Clinton, . . .	Clinton.
Goodhue, Elbridge W., . .	1,500	Haydenville, . . .	Chesterfield, Williamsburg, Worthington.
Graves, S. Monroe, . . .	2,800	Wellesley Hills, . .	Wellesley.
Gray, John C., . . .	3,000	Chicopee, . . .	Chicopee.
Grout, Edgar H., . . .	1,800	East Bridgewater, . .	East Bridgewater, West Bridge- water.
Gushee, Walter E., . . .	2,000	Ludlow, . . .	Agawam, Ludlow.
Haines, T. M., . . .	1,600	Rockland, . . .	Rockland.
Hall, I. Freeman, . . .	2,500	North Adams, . . .	North Adams.
Hall, Wells A., ¹ . . .	2,500	Concord Junction, . .	Concord.
Harrington, Arthur C., . .	1,700	North Adams, Box 83,	Clarksburg, Florida, Monroe, Savoy.
Harris, Charles A., . . .	2,200	Plymouth, . . .	Plymouth.
Harrub, H. W., . . .	2,500	Taunton, . . .	Taunton.
Hayes, James S., . . .	1,700	Rockland, . . .	Hanover, Hanson, Norwell.
Haynes, Edwin L., . . .	2,000	Methuen, . . .	Methuen.
Herron, Schuyler F., . . .	2,950	Winchester, . . .	Winchester.
Hill, Frank H., . . .	2,100	Littleton, . . .	Acton, Carlisle, Littleton, West- ford.
Hine, Roderick W., . . .	2,300	Dedham, . . .	Dedham.
Hobson, Clifton H., . . .	2,100	Palmer, . . .	Palmer.
Holman, Carl, . . .	2,200	Falmouth, . . .	Falmouth.
Hopkins, L. Thomas, . . .	1,700	Yarmouth Port, . .	Brewster, Dennis, Yarmouth.

¹ Also principal of high school.

List of superintendents of schools, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Howard, Elmer F., . . .	\$1,800	East Northfield, . . .	Gill, Leyden, Northfield, Warwick.
Howard, Nelson G., . . .	2,650	Hingham,	Hingham, Hull.
Humphrey, Chester W., . . .	2,000	Rochester,	Carver, Lakeville, Raynham, Rochester.
Jackson, Charles S., . . .	3,200	25 West Baltimore Street, Lynn.	Lynn.
Jenkins, Ira A.,	1,900	Foxborough,	Foxborough, Norton, Plainville.
Johnson, Frank C.,	2,100	Ayer,	Ayer, Boylston, Shirley, West Boylston.
Jones, Asa M.,	2,000	Baldwinsville,	Hubbardston, Phillipston, Royalston, Templeton.
Jones, Burr F.,	1,600	Amesbury,	Amesbury.
Judkins, Clarence L., . . .	1,700	Uxbridge,	Douglas, Uxbridge.
Keith, Allen P.,	4,000	New Bedford,	New Bedford.
Keyes, A. H.,	2,400	Needham,	Needham.
King, Theodore W.,	1,600	West Stockbridge, . . .	Alford, Egremont, Richmond, West Stockbridge.
Kingman, Frederic W., . . .	2,150	Walpole,	Walpole.
Knight, Frederic B.,	1,700	Ipswich,	Ipswich.
Knight, Herman C.,	1,800	Townsend,	Ashby, Lunenburg, Townsend.
Knox, Herman N.,	1,800	Wareham,	Marion, Wareham.
Lamphrey, Leila M., Ass't,	1,900	Lawrence,	Lawrence.
Lary, Stanley C., ¹	2,000	Cohasset,	Cohasset.
Lewis, Alvan R.,	1,500	Belchertown,	Belchertown, Enfield.
Lewis, Homer P.,	4,500	Worcester,	Worcester.
Loring, Everett G.,	1,600	Lanesborough,	Cheshire, Hancock, Lanesborough, New Ashford.
Lyman, C. S.,	2,800	Hudson,	Groton, Hudson, Lincoln.
Mackin, John C., ²	1,800	Manchester,	Manchester.
Marsh, Frank M.,	3,000	Milton,	Milton.
Marshall, Farnsworth G., . .	2,800	Malden,	Malden.
Martin, Robert W.,	1,650	Ashfield,	Ashfield, Cummington, Goshen, Plainfield.
McCann, Josiah S.,	1,700	Groveland,	Boxford, Georgetown, Groveland, Rowley.
McSherry, Francis,	3,375	Holyoke,	Holyoke.
Melcher, S. A.,	2,500	Whitinsville,	Northbridge.
Merriam, Burr J.,	2,000	Marblehead,	Marblehead.
Merrill, Leon O.,	1,500	Huntington,	Blandford, Huntington, Montgomery, Russell.
Miller, William D.,	2,000	Easthampton,	Easthampton, Southamton, Westhampton.
Millington, William H., . . .	1,800	Maynard,	Boxborough, Maynard, Stow.
Mitchell, Walter G.,	1,200	Williamstown,	Williamstown.
Molloy, Hugh J.,	3,000	Lowell,	Lowell.
Moore, William C.,	1,800	Newburyport,	Newburyport.

¹ Also principal of high school.² Also principal of grammar school.

List of superintendents of schools, alphabetically arranged, with their superintendencies — Continued.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Mugan, Mary A. S., Ass't,	\$2,400	Fall River, . . .	Fall River.
Nickerson, Fred H., . .	3,000	Medford, . . .	Medford.
Nims, Wesley E., . . .	1,700	Orange, . . .	Orange.
Parker, Walter S., Ass't, .	5,500	Boston, . . .	Boston.
Parkinson, William D., .	2,500	Waltham, . . .	Waltham.
Parlin, Frank E., . . .	3,000	Chelsea, . . .	Chelsea.
Paull, Austin R., . . .	1,900	Pepperell, . . .	Bolton, Dunstable, Harvard, Pepperell.
Pearson, Parker T., . . .	2,200	East Weymouth, . .	Weymouth.
Pennell, Charles M., . .	1,800	Provincetown, . . .	Provincetown, Truro, Wellfleet.
Perry, William H., . . .	2,425	Leominster, . . .	Leominster.
Persons, Clair G., . . .	3,000	Pittsfield, . . .	Pittsfield.
Phipps, Harrie J., ¹ . . .	2,400	North Easton, . . .	Easton.
Pratt, Henry H., . . .	1,700	119 State Street, New- buryport.	Merrimac, Newbury, Salisbury, West Newbury.
Price, Wilfred H., . . .	2,200	Watertown, . . .	Watertown.
Prior, Charles F., . . .	2,400	Fairhaven, . . .	Acushnet, Fairhaven, Matta- poisett.
Prior, Leon E., . . .	1,700	South Dartmouth, . .	Dartmouth.
Purdom, J. Leslie, ¹ . . .	3,000	Great Barrington, . .	Great Barrington.
Putney, Walter K., . . .	1,500	Ashland, . . .	Ashland, Hopkinton.
Rafter, Augustine L., Ass't,	5,500	Boston, . . .	Boston.
Randall, Charles L., . . .	2,400	97 18th Street, Lowell,	Dracut, North Reading, Tewks- bury, Tyngsborough, Wilming- ton.
Reed, Carroll R., . . .	2,800	Amherst, . . .	Amherst, Pelham.
Reynolds, Fordyce T., . .	2,200	Gardner, . . .	Gardner.
Richards, Clinton J., . .	1,800	Hatfield, . . .	Bernardston, Hadley, Hatfield.
Richardson, Charles C., .	1,600	North Dana, . . .	Dana, Greenwich, New Salem, Prescott.
Ripley, Mrs. Ellor C., Ass't,	5,496	Boston, . . .	Boston.
Robinson, Albert, . . .	2,300	Peabody, . . .	Peabody.
Robinson, Ernest W., . .	2,650	Dudley, . . .	Dudley, Webster.
Rollins, Arthur S., ¹ . . .	2,100	Lancaster, . . .	Lancaster.
Safford, Adelbert L., ¹ . .	2,800	Reading, . . .	Reading.
Sanborn, Henry C., . . .	2,000	Danvers, . . .	Danvers.
Sanderson, William H., . .	1,700	Chester, . . .	Becket, Chester, Middlefield.
Scully, John F., . . .	2,900	Arlington, . . .	Arlington.
Sheridan, Bernard M., . .	3,500	Lawrence, . . .	Lawrence.
Sims, William F., . . .	2,000	Saugus, . . .	Saugus.
Small, Alberto W., . . .	1,500	Chelmsford Centre, . .	Chelmsford.

¹ Also principal of high school.

List of superintendents of schools, alphabetically arranged, with their superintendencies — Concluded.

SUPERINTENDENTS.	Salaries.	Addresses.	Superintendencies.
Smith, Abbie A., Ass't, . . .	\$1,000	Everett, . . .	Everett.
Smith, Arthur W., . . .	1,500	Shelburne Falls, . . .	Buckland, Colrain, Shelburne.
Stanton, Mrs. Marion W., . . .	1,500	Lee, . . .	Lee, Monterey, Otis, Tyringham.
Stearns, Mrs. Cora A., . . .	1,550	Wendell Depot, . . .	Erving, Leverett, Shutesbury, Wendell.
Stiles, Chester D., . . .	1,700	South Deerfield, . . .	Conway, Deerfield, Sunderland, Whately.
Stuart, Josephine, Ass't, . . .	2,400	New Bedford, . . .	New Bedford.
Taft, Leanora E., . . .	1,650	40 High Street, Springfield.	East Longmeadow, Hampden, Longmeadow, Wilbraham.
Taylor, Randall L., . . .	1,800	Blackstone, . . .	Blackstone, Seekonk.
Tenney, Fred C., . . .	1,500	North Brookfield, . . .	Brookfield, North Brookfield.
Thompson, Frank V., Asst., . . .	5,496	Boston, . . .	Boston.
Tirrell, Edwin S., ¹ . . .	1,500	Nantucket, . . .	Nantucket.
Tower, Alfred O., . . .	1,600	Sheffield, . . .	Mount Washington, New Marlborough, Sheffield.
Tucker, Charles A., . . .	1,800	Lenox, . . .	Lenox.
Van Ornum, Frederick B., . . .	1,950	Northborough, . . .	Berlin, Northborough, Shrewsbury, Southborough.
Van Sickle, James H., . . .	5,000	Springfield, . . .	Springfield.
Vining, Eugene C., ¹ . . .	1,800	Billerica, . . .	Billerica.
Waldron, Harry C., . . .	1,700	16 Vine Street, Leominster.	Princeton, Sterling, Westminster.
Wallace, B. Holmes, . . .	2,000	Westborough, . . .	Westborough.
Walter, Charles W., . . .	1,800	South Swansea, . . .	Somerset, Swansea.
Ward, W. Scott, . . .	2,200	Athol, . . .	Athol.
Webber, Arthur B., . . .	2,400	Stoneham, . . .	Bedford, Stoneham.
West, Melvin J., . . .	1,800	Millis, . . .	Medfield, Millis, Norfolk, Westwood.
Wheeler, Frederic A., . . .	1,800	Monson, . . .	Brimfield, Monson.
Wheeler, Ulysses G., . . .	4,500	Newtonville, . . .	Newton.
Whitman, Herbert L., . . .	1,900	Buzzards Bay, . . .	Bourne, Mashpee, Sandwich.
Whitman, Willard M., . . .	2,100	Swampscott, . . .	Swampscott.
Whitney, Fairfield, . . .	3,000	Everett, . . .	Everett.
Whittemore, Frederic E., . . .	1,750	South Hadley Falls, . . .	Granby, South Hadley.
Wiggin, Ralph L., . . .	2,000	South Braintree, . . .	Braintree.
Willard, Edgar L., . . .	2,000	Natick, . . .	Natick.
Williams, Harvey R., . . .	2,000	Wenham, . . .	Essex, Lynnfield, Middleton, Topsfield, Wenham.
Williams, Loring G., . . .	2,000	Harwich, . . .	Chatham, Eastham, Harwich, Orleans.
Wyman, Elwood T., . . .	2,000	Whitman, . . .	Whitman.
(Total, 195.)			

¹ Also principal of high school.

*Table of Superintendency Unions.**Index to towns in the table.*

[NOTE. — The number preceding the name of the town is that of the superintendency union in which the town is to be found in the following table.]

34 Acton.	14 Buckland.
29 Acushnet.	37 Burlington.
60 Agawam.	34 Carlisle.
55 Alford.	51 Carver.
38 Amherst.	30 Charlemont.
65 Ashburnham.	57 Charlton.
31 Ashby.	23 Chatham.
36 Ashfield.	47 Cheshire.
3 Ashland.	7 Chester.
49 Auburn.	54 Chesterfield.
41 Avon.	26 Chilmark.
67 Ayer.	72 Clarksburg.
5 Barre.	14 Colrain.
7 Becket.	59 Conway.
74 Bedford.	36 Cummington.
63 Belchertown.	48 Dana.
22 Bellingham.	59 Deerfield.
37 Belmont.	17 Dennis.
56 Berkley.	56 Dighton.
6 Berlin.	42 Douglas.
39 Bernardston.	32 Dover.
73 Blackstone.	10 Dracut.
40 Blandford.	62 Dudley.
66 Bolton.	66 Dunstable.
15 Bourne.	1 Duxbury.
58 Boxborough.	16 East Bridgewater.
27 Boxford.	23 Eastham.
67 Boylston.	4 Easthampton.
17 Brewster.	19 East Longmeadow.
8 Brimfield.	26 Edgartown.
11 Brookfield.	55 Egremont.

Superintendency Unions — Continued.

63 Enfield.	28 Holliston.
43 Erving.	22 Hopedale.
50 Essex.	3 Hopkinton.
29 Fairhaven.	2 Hubbardston.
72 Florida.	40 Huntington.
70 Foxborough.	46 Kingston.
71 Franklin.	51 Lakeville.
69 Freetown.	47 Lanesborough.
26 Gay Head.	44 Lee.
27 Georgetown.	57 Leicester.
25 Gill.	43 Leverett.
36 Goshen.	25 Leyden.
69 Gosnold.	34 Littleton.
12 Grafton.	19 Longmeadow.
24 Granby.	60 Ludlow.
61 Granville.	31 Lunenburg.
48 Greenwich.	50 Lynnfield.
27 Groveland.	1 Marshfield.
39 Hadley.	15 Mashpee.
46 Halifax.	29 Mattapoisett.
19 Hampden.	58 Maynard.
47 Hancock.	52 Medfield.
20 Hanover.	28 Medway.
20 Hanson.	22 Mendon.
5 Hardwick.	64 Merrimac.
66 Harvard.	7 Middlefield.
23 Harwich.	50 Middleton.
39 Hatfield.	13 Millbury.
30 Hawley.	52 Millis.
30 Heath.	72 Monroe.
45 Hinsdale.	8 Monson.
41 Holbrook.	44 Monterey.
35 Holden.	40 Montgomery.
18 Holland.	53 Mount Washington.

Superintendency Unions — Continued.

47 New Ashford.	51 Rochester.
33 New Braintree.	30 Rowe.
64 Newbury.	27 Rowley.
53 New Marlborough.	2 Royalston.
48 New Salem.	40 Russell.
52 Norfolk.	35 Rutland.
6 Northborough.	64 Salisbury.
11 North Brookfield.	61 Sandisfield.
25 Northfield.	15 Sandwich.
10 North Reading.	72 Savoy.
70 Norton.	1 Scituate.
20 Norwell.	73 Seekonk.
26 Oak Bluffs.	53 Sheffield.
35 Oakham.	14 Shelburne.
23 Orleans.	28 Sherborn.
44 Otis.	67 Shirley.
13 Oxford.	6 Shrewsbury.
35 Paxton.	43 Shutesbury.
38 Pelham.	68 Somerset.
46 Pembroke.	4 Southampton.
66 Pepperell.	6 Southborough.
45 Peru.	24 South Hadley.
5 Petersham.	61 Southwick.
2 Phillipston.	9 Sterling.
36 Plainfield.	74 Stoneham.
70 Plainville.	58 Stow.
46 Plympton.	33 Sturbridge.
48 Prescott.	32 Sudbury.
9 Princeton.	59 Sunderland.
21 Provincetown.	49 Sutton.
41 Randolph.	68 Swansea.
51 Raynham.	2 Templeton.
56 Rehoboth.	10 Tewksbury.
55 Richmond.	26 Tisbury.

Superintendency Unions — Continued.

61 Tolland.	33 West Brookfield.
50 Topsfield.	34 Westford.
31 Townsend.	4 Westhampton.
21 Truro.	9 Westminster.
10 Tyngsborough.	64 West Newbury.
44 Tyringham.	69 Westport.
12 Upton.	55 West Stockbridge.
42 Uxbridge.	26 West Tisbury.
18 Wales.	52 Westwood.
18 Warren.	59 Whately.
25 Warwick.	19 Wilbraham.
45 Washington.	54 Williamsburg.
32 Wayland.	10 Wilmington.
62 Webster.	65 Winchendon.
21 Wellfleet.	45 Windsor.
43 Wendell.	54 Worthington.
50 Wenham.	71 Wrentham.
67 West Boylston.	17 Yarmouth.
16 West Bridgewater.	

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1914.	Number of schools, 1913-14.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
1	Duxbury,	1888	\$3,640,339	11	$\frac{1}{3}$	\$250 00	—	\$1,900 00
	Marshfield, . . .	1888	2,613,780	8	$\frac{1}{3}$	250 00	\$416 67	
	Scituate,	1888	5,697,535	12	$\frac{1}{3}$	250 00	—	
2	Hubbardston, . .	1889	757,225	7	$\frac{2}{10}$	150 00	250 00	2,000 00
	Phillipston, . . .	1889	311,753	4	$\frac{1}{10}$	75 00	125 00	
	Royalston,	1889	748,477	8	$\frac{2}{10}$	150 00	250 00	
	Templeton, . . .	1889	1,974,746	16	$\frac{9}{10}$	375 00	625 00	
3	Ashland,	1889	1,459,065	9	$\frac{3}{5}$	300 00	500 00	1,500 00
	Hopkinton, . . .	1889	1,889,140	12	$\frac{3}{5}$	450 00	750 00	
4	Easthampton, . .	1889	7,494,160	32	$\frac{13}{20}$	450 00	—	2,000 00
	Southampton, . .	1889	573,954	8	$\frac{9}{20}$	187 50	312 50	
	Westhampton, . .	1889	266,468	6	$\frac{9}{20}$	112 50	187 50	
5	Barre,	1890	2,724,100	14	$\frac{3}{5}$	300 00	500 00	1,900 00
	Hardwick,	1890	2,906,135	15	$\frac{3}{5}$	300 00	500 00	
	Petersham,	1890	1,152,425	6	$\frac{1}{5}$	150 00	250 00	
6	Berlin,	1890	647,995	6	$\frac{1}{4}$	107 14	178 57	1,950 00
	Northborough, . .	1890	1,926,775	7	$\frac{2}{4}$	214 29	357 15	
	Shrewsbury, . . .	1890	2,725,936	13	$\frac{2}{4}$	214 28	357 13	
	Southborough, . .	1890	2,316,178	25	$\frac{2}{4}$	214 29	357 15	
7	Becket,	1890	651,934	6	$\frac{124}{500}$	186 00	310 00	1,700 00
	Chester,	1890	843,038	12	$\frac{285}{500}$	427 50	712 50	
	Middlefield, . . .	1890	214,802	7	$\frac{91}{500}$	136 50	227 50	
8	Brimfield,	1890	641,800	7	$\frac{3}{10}$	225 00	375 00	1,800 00
	Monson,	1890	1,907,625	22	$\frac{7}{10}$	525 00	875 00	
9	Princeton,	1890	1,485,128	9	$\frac{1}{5}$	150 00	250 00	1,700 00
	Sterling,	1890	1,270,940	11	$\frac{2}{5}$	300 00	500 00	
	Westminister, . .	1890	977,225	12	$\frac{2}{5}$	300 00	500 00	
10	Dracut,	1891	2,531,647	18	$\frac{9}{25}$	270 00	450 00	2,400 00
	North Reading, . .	1891	982,734	4	$\frac{4}{25}$	60 00	100 00	
	Tewksbury,	1891	1,692,115	8	$\frac{4}{25}$	120 00	200 00	
	Tyngsborough, . .	1891	707,786	4	$\frac{4}{25}$	60 00	100 00	
	Wilmington, ¹ . . .	1911	1,980,716	13	$\frac{9}{25}$	240 00	400 00	
11	Brookfield,	1891	1,407,002	13	$\frac{1}{2}$	375 00	625 00	1,500 00
	North Brookfield, .	1891	2,000,428	10	$\frac{1}{2}$	375 00	625 00	
12	Grafton,	1891	3,243,720	21	$\frac{3}{4}$	562 50	937 50	1,900 00
	Upton,	1891	1,268,640	10	$\frac{1}{4}$	187 50	312 50	
13	Millbury,	1891	3,213,293	21	$\frac{3}{5}$	450 00	750 00	2,100 00
	Oxford,	1891	1,268,640	17	$\frac{2}{5}$	300 00	500 00	
14	Buckland,	1892	1,985,428	8	$\frac{3}{10}$	225 00	375 00	1,500 00
	Colrain,	1892	900,162	15	$\frac{4}{10}$	300 00	500 00	
	Shelburne,	1892	1,927,538	9	$\frac{3}{10}$	225 00	375 00	
15	Bourne,	1892	7,831,825	14	$\frac{9}{20}$	337 50	—	1,900 00
	Mashpee,	1892	266,000	2	$\frac{2}{20}$	75 00	125 00	
	Sandwich,	1892	1,426,250	10	$\frac{9}{20}$	337 50	562 50	
16	East Bridgewater, .	1892	2,655,347	18	$\frac{1}{2}$	375 00	625 00	1,800 00
	West Bridgewater, .	1892	1,641,549	15	$\frac{1}{2}$	375 00	625 00	
17	Brewster, ²	1903	863,995	4	$\frac{4}{25}$	120 00	200 00	1,700 00
	Dennis,	1892	1,372,485	12	$\frac{13}{25}$	360 00	600 00	
	Yarmouth,	1892	2,620,964	9	$\frac{9}{25}$	270 00	450 00	

¹ Added in 1911.² Added Oct. 17, 1903, by decree of State Board of Education.

Superintendency Unions — Continued.

Superintendent of schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
William E. Chaffin, Scituate,	Edgar L. Hitchcock, Marshfield Hills.	Charles S. Short, Scituate.
Asa M. Jones, Baldwinsville,	William A. Wheeler, East Templeton.	Mrs. Rose E. Coleman (Baldwinsville), Templeton.
Walter K. Putney, Ashland, .	Lewis D. Drawbridge, Hopkinton.	Florence M. Thompson, Ashland.
William D. Miller, Easthampton.	Rev. Franz Willer, Easthampton.	Charles N. Loud, Westhampton.
Albert S. Cole, Barre, . . .	Dr. George A. Brown, Barre,	O. A. Tuttle (Gilbertville), Hardwick.
Frederick B. Van Orman, Northborough.	Seth H. Howes, Southborough.	Edwin S. Corey, Northborough.
William H. Sanderson, Chester.	Clayton B. Cone, Chester, .	Merton E. Johnson, Becket.
Frederic A. Wheeler, Monson,	Robert V. Sawin, Brimfield,	Dr. E. W. Capen, Monson.
Harry C. Waldron, 16 Vine Street, Leominster.	William M. Roper, Jr., Princeton Depot.	Mrs. Elizabeth G. Devere, Sterling.
Charles L. Randall, 97 18th Street, Lowell.	Wilbur A. Patten, Tewksbury,	Edward S. Lewis, Wilmington.
Fred C. Tenney, North Brookfield.	Dr. Mary H. Sherman, Brookfield.	James W. Wall, Brookfield.
Thomas H. DeCoudres, Grafton.	Francis M. McGarry, Grafton,	I. Plummer Taft, West Upton.
Chauncey C. Ferguson, Millbury.	Homer S. Joslin, Oxford, .	Walter B. Horne, Millbury.
Arthur W. Smith, Shelburne Falls.	George W. Halligan, Shelburne Falls.	Charles W. Trow, Buckland.
Herbert L. Whitman, Buzards Bay.	Dr. Samuel M. Beale, Sandwich.	Anna M. Starbuck (Bourne-dale), Bourne.
Edgar H. Grout, East Bridgewater.	Clinton P. Howard, West Bridgewater.	Corelli C. Alger, West Bridgewater.
L. Thomas Hopkins, Yarmouth Port.	Edmund W. Eldridge, Yarmouth.	George A. Baker, Dennis.

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1914.	Number of schools, 1913-14.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
18	Holland, ¹ . . .	1902	\$116,133	1	$\frac{1}{15}$	\$50 00	\$83 33	1,700 00
	Wales, . . .	1893	259,358	2	$\frac{2}{15}$	100 00	166 67	
	Warren, . . .	1893	2,562,028	14	$\frac{14}{15}$	600 00	1,000 00	
19	East Longmeadow, . . .	1893	1,256,140	11	$\frac{2}{6}$	250 00	416 67	1,650 00
	Hampden, . . .	1893	475,157	6	$\frac{2}{6}$	125 00	208 33	
	Longmeadow, . . .	1893	3,298,570	5	$\frac{2}{6}$	125 00	208 33	
	Wilbraham, . . .	1893	1,415,869	12	$\frac{2}{6}$	250 00	416 67	
20	Hanover, . . .	1894	2,131,850	10	$\frac{1}{3}$	250 00	416 66	1,700 00
	Hanson, . . .	1894	1,483,510	10	$\frac{1}{3}$	250 00	416 67	
	Norwell, . . .	1894	1,176,620	8	$\frac{1}{3}$	250 00	416 67	
21	Provincetown, . . .	1894	2,423,370	21	$\frac{21}{33}$	522 74	871 22	1,800 00
	Truro, ¹ . . .	1902	423,085	5	$\frac{5}{33}$	113 63	189 39	
	Wellfleet, . . .	1894	842,310	5	$\frac{5}{33}$	113 63	189 39	
22	Bellingham, . . .	1894	1,004,290	10	$\frac{1}{3}$	250 00	416 67	2,000 00
	Hopedale, . . .	1894	6,705,900	12	$\frac{1}{3}$	250 00	—	
	Mendon, . . .	1894	717,575	6	$\frac{1}{3}$	250 00	416 67	
23	Chatham, ² . . .	1903	1,711,560	8	$\frac{9}{20}$	232 76	387 93	2,000 00
	Eastham, . . .	1894	490,016	3	$\frac{3}{20}$	77 59	129 31	
	Harwich, . . .	1894	1,673,208	12	$\frac{12}{20}$	310 34	517 24	
	Orleans, . . .	1894	3,835,589	5	$\frac{5}{20}$	129 31	—	
24	Granby, . . .	1895	663,320	7	$\frac{1}{4}$	150 00	250 00	1,750 00
	South Hadley, . . .	1895	3,330,901	23	$\frac{4}{5}$	600 00	1,000 00	
25	Gill, . . .	1895	503,251	6	$\frac{1}{5}$	150 00	250 00	1,800 00
	Leyden, ³ . . .	1901	227,965	5	$\frac{1}{5}$	150 00	250 00	
	Northfield, . . .	1895	1,485,405	10	$\frac{2}{5}$	300 00	500 00	
	Warwick, . . .	1895	469,188	3	$\frac{1}{5}$	150 00	250 00	
26	Chilmark, ⁴ . . .	1897	395,951	2	$\frac{2}{20}$	75 00	125 00	2,000 00
	Edgartown, . . .	1895	1,380,610	7	$\frac{4}{20}$	150 00	250 00	
	Gay Head, ¹ . . .	1902	45,028	1	$\frac{1}{20}$	37 50	62 50	
	Oak Bluffs, . . .	1895	1,947,500	7	$\frac{5}{20}$	187 50	312 50	
	Tisbury, . . .	1895	2,018,955	8	$\frac{5}{20}$	187 50	312 50	
	West Tisbury, . . .	1895	756,983	4	$\frac{2}{20}$	112 50	187 50	
27	Boxford, ⁵ . . .	1912	1,607,673	6	$\frac{1}{5}$	150 00	250 00	1,700 00
	Georgetown, . . .	1895	1,321,663	8	$\frac{1}{5}$	150 00	250 00	
	Groveland, . . .	1895	1,265,388	12	$\frac{2}{5}$	300 00	500 00	
	Rowley, . . .	1895	2,174,327	8	$\frac{1}{5}$	150 00	250 00	
28	Holliston, . . .	1896	2,034,952	13	$\frac{2}{5}$	300 00	500 00	1,850 00
	Medway, . . .	1896	1,790,895	13	$\frac{2}{5}$	300 00	500 00	
	Sherborn, . . .	1896	2,393,436	8	$\frac{1}{5}$	150 00	250 00	
29	Acushnet, . . .	1897	1,154,020	8	$\frac{1}{6}$	125 00	208 33	2,400 00
	Fairhaven, . . .	1897	4,226,832	20	$\frac{4}{6}$	500 00	—	
	Mattapoisett, . . .	1897	1,895,563	7	$\frac{1}{6}$	125 00	208 33	
30	Charlemont, . . .	1897	584,799	9	$\frac{9}{25}$	270 00	450 00	1,500 00
	Hawley, . . .	1897	253,564	8	$\frac{8}{25}$	240 00	400 00	
	Heath, ¹ . . .	1902	235,723	4	$\frac{4}{25}$	120 00	200 00	
	Rowe, . . .	1897	263,554	5	$\frac{5}{25}$	120 00	200 00	
31	Ashby, . . .	1897	644,386	5	$\frac{2}{10}$	150 00	250 00	1,800 00
	Lunenburg, ⁶ . . .	1905	1,506,291	8	$\frac{4}{10}$	225 00	375 00	
	Townsend, . . .	1897	1,419,974	8	$\frac{5}{10}$	375 00	625 00	

¹ Added in 1902.² Added Oct. 17, 1903, by decree of State Board of Education.³ Added in 1901.

Superintendency Unions — Continued.

Superintendent of schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
Albert J. Chidester, Warren, .	Dr. John E. Dalton, Warren,	Rev. Olney I. Darling, Warren.
Leonora E. Taft, 40 High Street, Springfield.	Mervin H. Pease, Ludlow, R. F. D. No. 2.	Evanore O. Beebe, North Wilbraham.
James S. Hayes, Rockland, .	Dr. Clarence L. Howes, Hanover.	Carrie M. Ford, Norwell.
Charles M. Pennell, Provincetown.	Andrew T. Williams, Provincetown.	John B. Dyer, Truro.
Francello G. Atwell, Hopedale.	Lyman Cook, Milford, R. F. D.	Frank J. Dutcher, Hopedale.
Loring G. Williams, Harwich,	Harrie D. Handy, Harwich,	Mrs. Margaret E. Gigger, Chatham.
Frederic E. Whittemore, South Hadley Falls.	Charles A. Judd, South Hadley Falls.	Frank M. Graves, Granby.
Elmer F. Howard, East Northfield.	Leon R. Alexander, Northfield.	W. W. Coe, Northfield.
Charles A. Crowell, Jr., Vineyard Haven.	Ulysses E. Mayhew, West Tisbury.	Anson M. Luce (Vineyard Haven), Tisbury, R. F. D. No. 1.
Josiah S. McCann, Groveland,	Albert L. Wales, Groveland,	C. Atherton Holmes, Georgetown.
Carroll H. Drown, West Medway.	Henry P. Dickinson, Holliston.	Dr. John H. Wyman, Medway.
Charles F. Prior, Fairhaven,	C. Julian Tuthill, Mattapoisett.	Walter E. Tripp, Acushnet.
Frank P. Davison, Charlemont.	J. C. Burrington, Charlemont,	Mabel P. Sears, Charlemont.
Herman C. Knight, Townsend.	Albert S. Howard, Townsend,	Mrs. Frederick C. Cross, Lunenburg, R. F. D.

* Added in 1897.

* Added in 1912.

* Added May 16, 1905, by decree of State Board of Education.

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1914.	Number of schools, 1913-14.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
32	Dover, . . .	1898	\$8,385,497	9	$\frac{2}{10}$	\$150 00	—	\$1,650 00
	Sudbury, . . .	1898	1,498,570	7	$\frac{3}{10}$	225 00	\$375 00	
	Wayland, . . .	1898	3,014,601	11	$\frac{5}{10}$	375 00	625 00	
33	New Braintree, . . .	1898	412,369	3	$\frac{3}{10}$	225 00	375 00	1,500 00
	Sturbridge, . . .	1898	941,730	11	$\frac{4}{10}$	300 00	500 00	
	West Brookfield, . . .	1898	995,414	7	$\frac{3}{10}$	225 00	375 00	
34	Acton, . . .	1898	2,425,035	10	$\frac{11}{40}$	206 25	343 75	2,100 00
	Carlisle, ¹ . . .	1911	492,405	3	$\frac{4}{40}$	75 00	125 00	
	Littleton, . . .	1898	1,232,579	7	$\frac{8}{40}$	150 00	250 00	
	Westford, . . .	1898	2,256,593	15	$\frac{17}{40}$	318 75	531 25	
35	Holden, . . .	1900	1,857,782	16	$\frac{19}{60}$	375 00	625 00	1,700 00
	Oakham, . . .	1900	367,774	5	$\frac{3}{60}$	112 50	187 50	
	Paxton, . . .	1900	407,948	3	$\frac{2}{60}$	75 00	125 00	
	Rutland, . . .	1900	917,325	6	$\frac{5}{60}$	187 50	312 50	
36	Ashfield, . . .	1900	838,305	10	$\frac{19}{25}$	300 00	500 00	1,650 00
	Cummington, . . .	1900	357,670	7	$\frac{8}{25}$	240 00	400 00	
	Goshen, . . .	1900	238,001	3	$\frac{3}{25}$	90 00	150 00	
	Plainfield, . . .	1900	194,882	5	$\frac{4}{25}$	120 00	200 00	
37	Belmont, ² . . .	1910	8,826,320	25	$\frac{17}{20}$	637 50	—	2,500 00
	Burlington, . . .	1900	997,624	3	$\frac{3}{20}$	112 50	187 50	
38	Amherst, . . .	1901	5,731,635	21	$\frac{4}{5}$	600 00	—	2,800 00
	Pelham, . . .	1901	439,172	5	$\frac{1}{5}$	150 00	250 00	
39	Bernardston, . . .	1901	568,150	6	$\frac{7}{85}$	150 00	250 00	1,800 00
	Hadley, . . .	1901	2,043,212	13	$\frac{13}{35}$	278 57	464 28	
	Hatfield, . . .	1901	1,991,877	12	$\frac{15}{85}$	321 43	535 72	
40	Blandford, . . .	1901	695,403	9	$\frac{7}{80}$	175 00	291 67	1,500 00
	Huntington, . . .	1901	705,940	10	$\frac{19}{80}$	250 00	416 67	
	Montgomery, . . .	1901	159,069	4	$\frac{3}{80}$	75 00	124 99	
	Russell, . . .	1901	1,718,026	10	$\frac{19}{80}$	250 00	416 67	
41	Avon, . . .	1901	1,116,002	10	$\frac{4}{15}$	200 00	333 33	1,700 00
	Holbrook, . . .	1901	1,700,733	14	$\frac{5}{15}$	250 00	416 67	
	Randolph, . . .	1901	2,883,750	17	$\frac{6}{15}$	300 00	500 00	
42	Douglas, . . .	1901	1,308,564	13	$\frac{2}{5}$	300 00	500 00	1,700 00
	Uxbridge, . . .	1901	4,021,370	27	$\frac{3}{5}$	450 00	—	
43	Erving, . . .	1901	1,076,742	8	$\frac{8}{20}$	300 00	500 00	1,550 00
	Leverett, . . .	1901	392,009	5	$\frac{3}{20}$	187 50	312 50	
	Shutesbury, . . .	1901	344,102	3	$\frac{3}{20}$	112 50	187 50	
	Wendell, . . .	1901	512,869	4	$\frac{4}{20}$	150 00	250 00	
44	Lee, . . .	1901	2,781,712	14	$\frac{12}{25}$	360 00	600 00	1,500 00
	Monterey, . . .	1901	381,003	3	$\frac{3}{25}$	150 00	250 00	
	Otis, . . .	1901	292,963	6	$\frac{5}{25}$	150 00	250 00	
	Tyringham, . . .	1901	361,507	3	$\frac{3}{25}$	90 00	150 00	
45	Hinsdale, . . .	1901	746,603	10	$\frac{8}{20}$	300 00	500 00	1,600 00
	Peru, . . .	1901	167,356	3	$\frac{3}{20}$	112 50	187 50	
	Washington, ³ . . .	1912	299,875	4	$\frac{4}{20}$	150 00	250 00	
	Windsor, . . .	1901	295,222	6	$\frac{5}{20}$	187 50	312 50	
46	Halifax, . . .	1901	673,100	3	$\frac{2}{15}$	100 00	166 66	1,500 00
	Kingston, . . .	1901	1,682,480	12	$\frac{6}{15}$	300 00	500 00	
	Pembroke, . . .	1901	1,166,515	8	$\frac{5}{15}$	250 00	416 67	
	Plympton, . . .	1901	457,043	3	$\frac{2}{15}$	100 00	166 67	

¹ Added in 1911.² Added to Bedford-Burlington union in 1910.

Superintendency Unions — Continued.

Superintendent of schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
Frank H. Benedict, Cochituate.	- -	George F. Poutasse, Wayland.
Frederick E. Bragdon, West Brookfield.	John Day (Fiskdale), Sturbridge.	Bowman S. Beeman, Ware, Box 223.
Frank H. Hill, Littleton, .	Bertram E. Hall, West Acton,	Charles O. Prescott, Westford.
Robert I. Bramhall, Holden,	William C. Temple, Rutland,	Jennie M. Fairbanks, Holden.
Robert W. Martin, Ashfield, .	William Hunter, Ashfield, .	George B. Church, Shelburne Falls, R. F. D.
George P. Armstrong, Belmont.	Dr. L. B. Clark, Belmont, .	James McLaughlin, Burlington.
Carroll R. Reed, Amherst, .	Eugene P. Bartlett, Amherst,	C. S. Walker, Amherst.
Clinton J. Richards, Hatfield,	Clifton Johnson, Hadley, .	John E. Morse, Hadley.
Leon O. Merrill, Huntington,	Edmund H. Cross, Huntington.	Dr. Percy A. Shurtleff, Blandford.
Samuel F. Blodgett, Randolph.	Samuel B. Field, Holbrook,	Dr. George V. Higgins, Randolph.
Clarence L. Judkins, Uxbridge.	Charles W. Scott, Uxbridge, .	Gilbert W. Rowley, East Douglas.
Mrs. Cora A. Stearns, Wendell Depot.	Nathan J. Hunting, Shutesbury.	Mrs. Effie L. Bowen, Wendell.
Mrs. Marion W. Stanton, Lee,	D. M. Wilcox, Lee, . . .	J. J. Hassett, Lee.
Harry E. Gardner, Hinsdale,	Thomas A. Frissell, Hinsdale,	Thomas F. Ryan, Hinsdale.
George A. Coe, Kingston, .	John M. Monroe (Bryantville), Pembroke, R. F. D.	Oscar C. Swope, Kingston.

³ Added June 7, 1912, by decree of State Board of Education.

Superintendency Unions — Continued.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1914.	Number of schools, 1913-14.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
47	Cheshire, ¹	1912	\$871,879	8	$\frac{7}{20}$	\$262 50	\$437 50	\$1,600 00
	Hancock,	1902	415,230	5	$\frac{5}{20}$	187 50	312 50	
	Lanesborough,	1902	696,643	6	$\frac{7}{20}$	262 50	437 50	
	New Ashford,	1902	71,470	1	$\frac{7}{20}$	37 50	62 50	
48	Dana,	1902	451,898	4	$\frac{4}{17}$	176 47	294 12	1,600 00
	Greenwich,	1902	252,643	2	$\frac{2}{17}$	88 24	147 06	
	New Salem,	1902	406,760	7	$\frac{7}{17}$	308 82	514 70	
	Prescott,	1902	210,229	4	$\frac{4}{17}$	176 47	294 12	
49	Auburn,	1902	1,730,000	18	$\frac{1}{2}$	375 00	625 00	1,500 00
	Sutton,	1902	1,459,941	17	$\frac{1}{2}$	375 00	625 00	
50	Essex,	1902	1,267,965	8	$\frac{11}{40}$	206 25	343 75	2,000 00
	Lynnfield, ¹	1912	1,314,360	5	$\frac{7}{40}$	131 25	218 75	
	Middleton, ²	1905	929,322	4	$\frac{9}{40}$	112 50	187 50	
	Topsfield, ¹	1912	4,070,501	5	$\frac{9}{40}$	112 50	—	
	Wenham,	1902	3,303,250	7	$\frac{19}{40}$	187 50	312 50	
51	Carver,	1902	2,096,180	10	$\frac{12}{40}$	225 00	375 00	2,000 00
	Lakeville,	1902	1,284,000	7	$\frac{9}{40}$	168 75	281 25	
	Raynham, ¹	1912	913,030	8	$\frac{19}{40}$	187 50	312 50	
	Rochester,	1902	1,039,953	8	$\frac{9}{40}$	168 75	281 25	
52	Medfield, ²	1908	2,555,304	7	$\frac{1}{4}$	187 50	312 50	1,800 00
	Millis,	1902	1,395,435	8	$\frac{1}{4}$	187 50	312 50	
	Norfolk,	1902	1,163,852	6	$\frac{1}{4}$	187 50	312 50	
	Westwood,	1902	4,471,045	8	$\frac{1}{4}$	187 50	—	
53	Mount Washington,	1902	141,882	8	$\frac{9}{50}$	75 00	125 00	1,600 00
	New Marlborough,	1902	873,775	12	$\frac{29}{50}$	235 00	475 00	
	Sheffield,	1902	1,117,935	14	$\frac{24}{50}$	390 00	650 00	
54	Chesterfield,	1902	362,691	5	$\frac{1}{4}$	187 50	312 50	1,500 00
	Williamsburg,	1902	1,169,351	14	$\frac{2}{4}$	375 00	625 00	
	Worthington,	1902	374,074	8	$\frac{1}{4}$	187 50	312 50	
55	Alford,	1902	200,400	3	$\frac{3}{19}$	118 42	197 37	1,600 00
	Egremont,	1902	556,515	3	$\frac{3}{19}$	118 42	197 37	
	Richmond,	1902	610,338	6	$\frac{9}{19}$	236 84	394 73	
	West Stockbridge,	1902	553,860	7	$\frac{7}{19}$	276 32	460 53	
56	Berkley,	1902	563,587	8	$\frac{1}{5}$	150 00	250 00	1,700 00
	Dighton,	1902	1,496,537	13	$\frac{2}{5}$	300 00	500 00	
	Rehoboth,	1902	1,043,218	15	$\frac{2}{5}$	300 00	500 00	
57	Charlton,	1902	1,440,680	15	$\frac{1}{2}$	375 00	625 00	1,600 00
	Leicester,	1902	2,553,278	21	$\frac{1}{2}$	375 00	625 00	
58	Boxborough,	1902	288,183	4	$\frac{1}{10}$	75 00	125 00	1,800 00
	Maynard,	1902	4,132,045	25	$\frac{9}{10}$	450 00	—	
	Stow,	1902	1,156,688	7	$\frac{3}{10}$	225 00	375 00	
59	Conway,	1903	812,002	10	$\frac{24}{100}$	179 55	299 25	1,700 00
	Deerfield,	1903	2,599,582	15	$\frac{44}{100}$	327 60	546 00	
	Sunderland,	1903	682,279	5	$\frac{18}{100}$	137 55	229 25	
	Whately,	1903	723,596	5	$\frac{14}{100}$	105 30	175 50	
60	Agawam,	1903	2,913,357	17	$\frac{2}{5}$	300 00	500 00	2,000 00
	Ludlow,	1903	5,465,918	27	$\frac{3}{5}$	450 00	—	
61	Granville,	1903	533,297	10	$\frac{30}{100}$	225 00	375 00	1,500 00
	Sandisfield,	1903	438,292	7	$\frac{25}{100}$	187 50	312 50	
	Southwick,	1903	911,460	12	$\frac{35}{100}$	262 50	437 50	
	Tolland,	1903	260,684	1	$\frac{19}{100}$	75 00	125 00	
62	Dudley,	1903	2,120,505	16	$\frac{1}{3}$	250 00	416 67	2,650 00
	Webster,	1903	8,442,391	25	$\frac{2}{3}$	500 00	—	

¹ Added in 1912.² Added May 16, 1905, by decree of State Board of Education.

Superintendency Unions — Continued.

Superintendent of schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
Everett G. Loring, Lanesborough.	George Z. Dean, Cheshire,	Dr. Franklin C. Downing, Lanesborough.
Charles C. Richardson, North Dana.	William Bullard, North New Salem.	Mrs. Nellie M. Brown, North Dana.
Osmon C. Evans, 115 Lincoln Street, Worcester.	William T. Duvall, Auburn, Box 8.	Arthur C. Merrill, Sutton.
Harvey R. Williams, Wenham.	Frank S. Perkins, Middleton,	Adeline P. Cole, South Hamilton.
Chester W. Humphrey, Rochester.	Harmon S. Babcock, Raynham Center.	Ellis G. Cornish, Carver.
Melvin J. West, Millis, *	John C. Mulvehill, Westwood,	Roy K. Clark, Millis.
Alfred O. Tower, Sheffield,	Edwin L. Boardman, Sheffield.	Z. H. Cande, Sheffield, R. F. D. No. 1.
Elbridge W. Goodhue, Haydenville.	Thomas K. Utley, Chesterfield.	William H. Baker, Chesterfield.
Theodore W. King, West Stockbridge.	George A. Germann, Great Barrington, R. F. D. No. 1.	Rev. William M. Crane, Richmond, R. F. D.
Mortimer H. Bowman, Dighton.	J. S. Place, Dighton,	George H. Walker, North Dighton.
George B. Clarke, Leicester,	M. Daniel Woodbury, Charlton.	F. Willard Trask, Leicester.
William H. Millington, Maynard.	Burpee C. Steele, Boxborough,	John G. Peck, Stow.
Chester D. Stiles, South Deerfield.	Charles Moline, Sunderland,	James Campbell, South Deerfield.
Walter E. Gushee, Ludlow,	Albert A. Gove, Ludlow,	Percival V. Hastings, Agawam.
Harold C. Bales, Granville.	Charles M. Arnold, Southwick,	Mrs. Emma L. Stow, Granville Center.
Ernest W. Robinson, Dudley,	Spaulding Bartlett, Webster,	J. Joseph Giles, Dudley, R. F. D. No. 1.

* Added in 1908.

Superintendency Unions — Concluded.

Number.	UNIONS.	When formed.	Valuation of assessed estate, April 1, 1914.	Number of schools, 1913-14.	EACH TOWN'S SHARE OF SUPERINTENDENT'S —		State aid to each town.	Superintendent's salary.
					Service.	Salary.		
63	Belchertown, . . .	1904	\$982,330	16	$1\frac{1}{2}\frac{25}{25}$	\$540 00	\$900 00	\$1,500 00
	Enfield, . . .	1904	825,700	7	$\frac{7}{25}$	210 00	350 00	
64	Merrimac, ¹ . . .	1912	1,343,675	9	$\frac{7}{20}$	262 50	437 50	1,700 00
	Newbury, . . .	1905	1,589,230	8	$\frac{4}{20}$	150 00	250 00	
	Salisbury, . . .	1905	1,475,405	9	$\frac{4}{20}$	150 00	250 00	
	West Newbury, . .	1905	1,075,805	7	$\frac{5}{20}$	187 50	312 50	
65	Ashburnham, . . .	1905	1,277,095	11	$\frac{1}{3}$	250 00	416 67	2,000 00
	Winchendon, . . .	1905	4,343,633	29	$\frac{2}{3}$	500 00	—	
66	Bolton, . . .	1909	759,402	5	$\frac{2}{10}$	150 00	250 00	1,900 00
	Dunstable, ² . . .	1911	409,955	3	$\frac{1}{10}$	75 00	125 00	
	Harvard, . . .	1909	1,808,606	4	$\frac{2}{10}$	150 00	250 00	
	Pepperell, . . .	1909	2,358,557	14	$\frac{5}{10}$	375 00	625 00	
67 ³	Ayer, . . .	1909	2,320,136	11	$\frac{4}{10}$	300 00	500 00	2,100 00
	Boylston, . . .	1909	544,894	4	$\frac{1}{10}$	75 00	125 00	
	Shirley, . . .	1909	1,310,096	7	$\frac{2}{10}$	150 00	250 00	
	West Boylston, . .	1909	994,305	8	$\frac{3}{10}$	225 00	375 00	
68	Somerset, . . .	1909	1,796,655	15	$\frac{1}{2}$	375 00	625 00	1,800 00
	Swansea, . . .	1909	1,898,820	14	$\frac{1}{2}$	375 00	625 00	
69	Freetown, . . .	1911	1,070,580	10	$\frac{7}{20}$	262 50	437 50	1,800 00
	Gosnold, ⁴ . . .	1916	818,868	1	$\frac{1}{20}$	37 50	62 50	
	Westport, . . .	1911	2,385,750	19	$1\frac{1}{2}\frac{20}{20}$	450 00	750 00	
70	Foxborough, . . .	1911	2,734,175	16	$\frac{5}{10}$	375 00	625 00	1,900 00
	Norton, . . .	1911	1,666,500	10	$\frac{3}{10}$	225 00	375 00	
	Plainville, . . .	1911	1,042,912	6	$\frac{2}{10}$	150 00	250 00	
71	Franklin, . . .	1911	4,797,425	28	$\frac{7}{10}$	525 00	—	2,000 00
	Wrentham, . . .	1911	1,550,846	8	$\frac{3}{10}$	225 00	375 00	
72	Clarksburg, . . .	1912	298,373	7	$\frac{3}{10}$	225 00	375 00	1,700 00
	Florida, . . .	1912	379,972	5	$\frac{2}{10}$	150 00	250 00	
	Monroe, . . .	1912	185,659	2	$\frac{2}{10}$	150 00	250 00	
	Savoy, . . .	1912	194,895	7	$\frac{3}{10}$	225 00	375 00	
73	Blackstone, . . .	1913	2,453,285	26	$\frac{2}{3}$	500 00	833 33	1,800 00
	Seekonk, . . .	1913	1,797,065	14	$\frac{1}{3}$	250 00	416 67	
74	Bedford, . . .	1915	1,858,977	4	$\frac{1}{5}$	150 00	250 00	2,400 00
	Stoneham, . . .	1915	5,905,362	26	$\frac{4}{5}$	600 00	—	

NOTE. — 235 towns in unions, — 216 State-aided, 19 not State-aided.

¹ Added in 1912.— ² Added in 1911.³ Union No. 67, formed Sept. 20, 1909, by decree of State Board of Education.⁴ Added in 1916.

Superintendency Unions — Concluded.

Superintendent of schools.	JOINT COMMITTEE.	
	Chairman.	Secretary.
Alvan R. Lewis, Belchertown,	Mrs. M. Rozilla Barlow, Enfield.	Roswell Allen, Belchertown.
Henry H. Pratt, 119 State Street, Newburyport.	Frederick C. Grant, 35 Grove Street, Merrimac.	Irving A. French, 2 Elm Street, Salisbury.
E. Schuyler Cobb, Winchendon.	Rev. Alfred Free, Winchendon.	Mrs. Elizabeth E. Keese, Ashburnham.
Austin R. Paull, Pepperell, .	Rev. Dudley R. Child, Pepperell.	Frank S. Hamblin, Bolton.
Frank C. Johnson, Ayer, .	Albert W. Hinds, West Boylston.	George H. Brown, Ayer.
Charles W. Walter, South Swansea.	John D. Hilton, Swansea, .	Ira A. Hathaway, Somerset.
William L. Coggins, 95 Rotch Street, New Bedford.	Rev. John W. Reynolds (Assonet), Freetown.	Augustus R. Wood (Central Village), Westport.
Ira A. Jenkins, Foxborough,	Willis M. Fuller, Plainville, .	John E. Warren, Mansfield, R. F. D.
Leslie O. Cummings, Franklin.	Elbridge J. Whitaker, Wrentham.	Solon Abbott, Franklin.
Arthur C. Harrington, North Adams, Box 83.	James Wheeler, Florida, .	John Henderson (Briggsville), Clarksburg.
Randall L. Taylor, Blackstone.	Dr. Thomas F. Roche, Blackstone.	Henry W. Brown, Attleboro, R. F. D. No. 4.
Arthur B. Webber, Stoneham,	Dr. Ross K. Whiton, Bedford,	Walter Gorham, Stoneham.

NOTE. — Of the foregoing unions, those numbered 22, 26, 38 and 51 were authorized by special acts of the Legislature.

The financial years of all the unions date from July 1, with the exception of that numbered 67, which dates from October 15.

VI. CONFERENCES.

Conferences with School Committees.

A wide variety of practice obtains in the methods followed in the administration of public schools throughout the Commonwealth. The powers, duties and responsibilities of school officers have not been adequately defined. The absence of a clear understanding on the part of school officers as to their duties causes many embarrassing situations, and serious difficulties often occur in the management of the schools of cities and towns.

In some communities the administration of the schools is based upon sound business practice, while in others the administrative procedure is based mainly on custom.

With a view to improving the administration of schools, a series of conferences with school committees was held throughout the State in the spring of 1914. At each of the conferences there was a good representation from the school committees in the area. The total number of school committee members in attendance was 301. The number of towns represented was 228. In addition to school committee members, 113 superintendents of schools and 57 citizens interested in the work of the schools were in attendance.

The aim of these conferences was to bring before school committees statements of the approved practice in the administration of schools. Comparisons were made between the procedures followed in different parts of the State. Suggestions were presented on the best form of organization of school committees, on methods of holding meetings, and on the duties of the school committee. A series of propositions bearing upon the efficient conduct of the schools was presented and discussed at each meeting.

The Board of Education was represented on the program by David Snedden, Commissioner of Education, William Orr, Deputy Commissioner, and Francis G. Wadsworth, agent in charge of elementary education. At each conference there was associated with the representatives of the Board a superintendent of schools. The superintendents selected for this service were:

F. S. Brick, Montague.	Clinton J. Richards, Hadley.
Austin H. Fittz, Norwood.	E. W. Robinson, Webster.
Robert J. Fuller, North Attleborough.	Chester R. Stacy, Easton.
F. W. Kingman, Walpole.	F. A. Wheeler, Monson.
C. S. Lyman, Hudson.	H. R. Williams, Wenham.
B. J. Merriam, Marblehead.	L. G. Williams, Harwich.
C. L. Randall, Dracut.	

The list of conferences, with the names of places, the number in attendance, and the number of towns represented, is given herewith:

PLACE.	Date.	Attendance.	Number of towns represented.
Vineyard Haven,	March 12,	21	7
Bridgewater,	March 20,	31	14
Harwich,	March 24,	36	14
Fitchburg,	March 31,	34	17
South Framingham,	April 3,	32	16
Ipswich,	April 7,	27	10
Boston,	April 10,	68	40
Greenfield,	April 14,	51	22
Salem,	April 17,	19	9
Northampton,	April 21,	18	8
Worcester,	April 28,	52	29
Springfield,	May 1,	27	14
Great Barrington,	May 5,	16	9
North Adams,	May 8,	21	11
Fall River,	May 12,	18	8
Totals, . . . . .	. . . . .	471	228

Conferences with Superintendents of Schools.

Instead of the one-day conferences with superintendents of schools held at normal schools throughout the State, whereby a small group of superintendents assembled in each case for consideration of topics, the Board of Education in co-operation with the superintendents of schools conducted a one-week conference for superintendents, held at Cambridge, from June 28 to July 3. Over 100 superintendents of schools were in attendance. The principal value of the one-week conference is

that thereby superintendents of schools have an opportunity to become closely acquainted with one another, to understand each other's points of view, and to establish a spirit of good fellowship. Such a conference also affords an opportunity for a thorough discussion of the various topics brought up for consideration.

One of the important matters that came before this conference was a consideration of the courses of study for grades 1 to 6, prepared by superintendents of schools, in co-operation with the Board of Education.

The following resolutions were adopted by the superintendents in attendance: —

Resolved, That we express to the State Board of Education our appreciation of the professional profit we have derived from this conference and our desire that these conferences be held annually;

That we thank the president and fellows of Harvard University for their hospitality in furnishing us with a meeting place for this conference and for the courtesies they have extended to us during the conference;

That the State Board of Education be asked to appoint representatives to serve with a committee from this body to prepare legislation which shall more clearly define and differentiate the functions of school committees and school superintendents; and that we favor legislation that shall make void the election of any teacher not nominated by the superintendent of schools;

That we believe in the State certification of all superintendents and teachers and favor the enactment of legislation at the earliest possible moment to bring about these results;

That we favor a more equitable system of taxation for raising and distributing moneys for the support of the public schools of the State;

That the custom of holding State institutes should be revived and that the Legislature should appropriate sufficient funds for the support thereof;

That colleges offering courses in education be requested to give credit toward graduation for practice teaching done in approved high schools;

That we appreciate the evident willingness of the normal schools to receive suggestions and to co-operate with the superintendents in improving the quality of the teaching in the schools of the State;

That we approve of differentiation in courses of study in the last two years of the grammar schools in all communities where such differentiation is practicable;

That we favor the thorough trying out of the State courses of study now in preparation to the end that there may be greater uniformity in educational practice and less loss of time when a child moves from one community to another.

In addition a special resolution was passed approving the grant of retirement allowances to members of the Teachers' Retirement Association who, after twenty-five years of service, withdraw from teaching or superintending on account of disability.

Conferences with Teachers in Vocational Schools.

The third annual conference of teachers in Massachusetts State-aided vocational schools was held in Boston May 7 and 8, 1915. The program of the conference was built around two central ideas: one was to bring up for discussion the most difficult features of teaching encountered in the various phases of vocational education; the other was to divide the groups of teachers so that those vitally interested in the topic under discussion could be present. Both ideas were thoroughly covered.

The plan of carrying on a general meeting immediately followed by round-table discussions by several allied groups simultaneously in different rooms enabled a large range of important discussions to take place within a short period of time. It is interesting to note that 78 papers were read in the boys' industrial school section, 39 in the girls' trade section, and 25 in the girls' homemaking section. These papers represent the contributions of the directors, department heads, and nearly every full-responsibility teacher in the full-time day industrial schools. The material presented has been of such value to the teachers that steps are now being taken to print the entire proceedings, so that they can be studied by all teachers at their leisure.

Conferences with High School Teachers of Civics.

A series of conferences with teachers of civics in the high schools was held by Clarence B. Kingsley, representative of the Board of Education, in the fall of 1915, at the following places: Worcester, Fitchburg, Boston, Hyannis, North Adams and Springfield.

Teachers' Institutes.

Teachers' institutes were held in 1915 as follows:—

Date.	Where held.	Number present.	Towns represented.
Jan. 25,	Blackstone, . . .	45	Blackstone, Seekonk.
Sept. 17,	Northborough, . . .	50	Northborough, Southborough, Shrewsbury.

VII. STATE-AIDED VOCATIONAL EDUCATION.

Seventy-seven State-aided vocational schools, classified as administrative units (with a separate director in charge), are in operation in 39 cities and towns of the Commonwealth. On this basis of classification there were reported in the seventy-eighth annual report of the Board of Education 47 schools in 36 cities and towns.

The following schools were established during the school year 1914-15:—

TABLE NO. 1. — *Roster of State-aided vocational schools.*

1. SEVEN SCHOOLS ESTABLISHED DURING SCHOOL YEAR SEPT. 1, 1914, TO AUG. 31, 1915.

NAME OF SCHOOL.	Date of opening.
Boston Continuation School,	Sept., 1914
Clinton Vocational Agricultural Department,	Sept., 1914
Holyoke Day Vocational School,	Sept., 1914
Essex County School of Homemaking,	Sept., 1914
Attleboro Evening Industrial School,	Oct., 1914
Reading Vocational Agricultural Department,	April, 1915
Lawrence Part-time School of Homemaking,	April, 1915

2. FOUR SCHOOLS ESTABLISHED SINCE SEPT. 1, 1915.

Leominster Vocational Agricultural Department,	Sept., 1915
New Salem Vocational Agricultural Department,	Sept., 1915
Worcester School of Homemaking,	Sept., 1915
Fall River Voluntary Continuation School,	Sept., 1915

3. SEVENTY-SEVEN (ALL) SCHOOLS NOW IN OPERATION IN 39 CITIES AND TOWNS
LISTED CHRONOLOGICALLY BY TYPES OF SCHOOLS.

Group I. Twelve day industrial schools (boys).

NAME OF SCHOOL.	Es- tablished.	Director.
New Bedford Industrial School,	Nov., 1907	Arthur S. Allen.
Smith's Agricultural School and Northampton School of Industries.	Oct., 1908	Herbert N. Loomis.
Newton Vocational School,	Feb., 1909	Michael W. Murray.
Beverly Industrial School,	Aug., 1909	William P. Taylor.
Worcester Boys' Trade School,	Feb., 1910	Albert J. Jameson.
Somerville Vocational School for Boys,	Sept., 1910	Harry L. Jones.
Lowell Vocational School,	Sept., 1911	Thomas F. Fisher.
Springfield Vocational School,	Sept., 1911	Egbert E. MacNary.
Westfield Trade School,	Sept., 1911	Burton A. Prince.
Boston Industrial School for Boys,	Feb., 1912	William C. Crawford.
Quincy Industrial School,	Sept., 1912	J. Gould Spofford.
Holyoke Vocational School,	Sept., 1914	William H. Whitney.

Group II. Three day industrial schools (girls).

Boston Trade School for Girls,	Sept., 1909	Florence E. Leadbetter.
Worcester Girls' Trade School,	Sept., 1911	Helen R. Hildreth.
Cambridge Girls' Trade School,	Feb., 1913	Katherine A. Burke.

Group III. Sixteen evening industrial schools (men).

Cambridge Evening Industrial School,	Oct., 1907	John J. Mahoney.
New Bedford Evening Industrial School,	Nov., 1907	Arthur S. Allen.
Taunton Evening Industrial School,	Jan., 1908	Henry W. Harrub.
Lawrence Evening Industrial School,	March, 1908	Edgar A. Winters.
Boston Evening Industrial School,	Oct., 1908	W. Stanwood Field.
Chicopee Evening Industrial School,	Oct., 1908	John C. Gray.
Newton Evening Vocational School,	Feb., 1909	Michael W. Murray.
Worcester Boys' Evening Trade School,	Feb., 1910	Albert J. Jameson.
North Attleborough Evening Industrial School,	Oct., 1910	Robert J. Fuller.
Lowell Evening Vocational School,	Sept., 1911	Thomas F. Fisher.
Westfield Evening Trade School,	Sept., 1911	Burton A. Prince.
Everett Evening Industrial School,	Oct., 1911	J. Henry Clagg.
Holyoke Evening Vocational School,	Oct., 1911	William H. Whitney.
Quincy Evening Industrial School,	Oct., 1911	Albert L. Barbour.
Fall River Evening Industrial School,	Jan., 1914	Hector L. Belisle.
Attleboro Evening Industrial School,	Oct., 1914	Lewis A. Fales.

3. SEVENTY-SEVEN (ALL) SCHOOLS NOW IN OPERATION IN 39 CITIES AND TOWNS LISTED CHRONOLOGICALLY BY TYPES OF SCHOOLS — *Continued.*

Group IV. One evening industrial school (women).

NAME OF SCHOOL.	Es- tablished.	Director.
Boston Trade School for Girls,	Sept., 1909	Florence E. Leadbetter.

Group V. Nine homemaking schools (day).

New Bedford Household Arts School,	Nov., 1907	Arthur S. Allen.
Smith's Household Arts School,	Oct., 1908	Herbert N. Loomis.
Newton Vocational School,	Feb., 1909	Michael W. Murray.
Lowell Vocational School,	Sept., 1911	Thomas F. Fisher.
Somerville Girls' Vocational School,	Oct., 1911	Mary Henleigh Brown.
Boston Continuation School of Household Practice, .	Jan., 1913	W. Stanwood Field.
Essex County School of Homemaking,	Sept., 1914	Fred A. Smith.
Worcester Evening Household Arts School,	Sept., 1915	Helen R. Hildreth.
Lawrence Part-time School of Homemaking, . . .	April, 1915	Edgar A. Winters.

Group VI. Eighteen practical arts schools (evening).

New Bedford Evening Practical Arts School, . . .	Nov., 1907	Arthur S. Allen.
Taunton Evening Practical Arts School,	Jan., 1908	Henry W. Harrub.
Lawrence Evening Practical Arts School,	March, 1908	Edgar A. Winters.
Natick Evening Practical Arts School,	Oct., 1908	Edgar L. Willard.
Newton Evening Practical Arts School,	Feb., 1909	Michael W. Murray.
North Attleborough Evening Practical Arts School, .	Oct., 1910	Robert J. Fuller.
Lowell Evening Practical Arts School,	Sept., 1911	Thomas F. Fisher.
Worcester Evening Practical Arts School,	Sept., 1911	Helen R. Hildreth.
Everett Evening Practical Arts School,	Oct., 1911	Fairfield Whitney.
Holyoke Evening Practical Arts School,	Oct., 1911	William H. Whitney.
Quincy Evening Practical Arts School,	Oct., 1911	Albert L. Barbour.
Somerville Evening Practical Arts School,	Oct., 1911	Mary Henleigh Brown.
Boston Evening Practical Arts School,	Oct., 1912	W. Stanwood Field.
Cambridge Evening Practical Arts School,	Oct., 1912	John J. Mahoney.
Methuen Evening Practical Arts School,	Oct., 1912	Edwin L. Haynes.
Wakefield Evening Practical Arts School,	Oct., 1912	Willard B. Atwell.
Fall River Evening Practical Arts School,	Jan., 1914	Hector L. Belisle.
Walpole Evening Practical Arts School,	Jan., 1914	Frederick W. Kingman.

3. SEVENTY-SEVEN (ALL) SCHOOLS NOW IN OPERATION IN 39 CITIES AND TOWNS LISTED CHRONOLOGICALLY BY TYPES OF SCHOOLS — *Concluded.*

Group VII. Two continuation schools (compulsory and voluntary).

NAME OF SCHOOL.	Es- tablished.	Director.
Boston Continuation School (compulsory), . . .	Sept., 1914	W. Stanwood Field.
Fall River Continuation School (voluntary), . . .	Sept., 1915	Hector L. Belisle.

Group VIII. Three agricultural schools.

Smith's Agricultural School and Northampton School of Industries.	Oct., 1908	Herbert N. Loomis.
Bristol County Agricultural School,	Sept., 1913	George H. Gilbert.
Essex County Agricultural School,	Oct., 1913	Fred A. Smith.

Group IX. Thirteen agricultural departments.

Petersham Vocational Agricultural Department, . . .	Sept., 1911	Frank L. Edwards, In- structor.
Hadley Vocational Agricultural Department, . . .	Jan., 1912	Edward J. Burke, In- structor.
Harwich Vocational Agricultural Department, . . .	April, 1912	Milton S. Rose, Instruc- tor.
Easton Vocational Agricultural Department, . . .	Aug., 1912	Samuel C. Webster, Jr., Instructor.
Ashfield Vocational Agricultural Department, . . .	Aug., 1913	Rudolph Sussman, In- structor.
Sutton Vocational Agricultural Department, . . .	Aug., 1913	Ernest S. Clark, Jr., In- structor.
Brimfield Vocational Agricultural Department, ¹ . .	Sept., 1913	Leslie E. Abbott, In- structor.
Concord Vocational Agricultural Department, . . .	Sept., 1913	A. W. Doolittle; Law- rence A. Bevan, Ass't.
Marlborough Vocational Agricultural Department, . .	Nov., 1913	W. A. Davis, Instructor.
Clinton Vocational Agricultural Department, . . .	Sept., 1914	Daniel J. Curran, In- structor.
Reading Vocational Agricultural Department, . . .	May, 1915	John G. Powers, Instruc- tor.
Leominster Vocational Agricultural Department, . .	Sept., 1915	Daniel W. O'Brien, In- structor.
New Salem Vocational Agricultural Department, . .	Sept., 1915	Daniel J. Lewis, Instruc- tor.

¹ Changed from a school to a department, Jan. 1, 1915.

4. SEVEN SCHOOLS WHICH HAVE BEEN DISCONTINUED PREVIOUS TO SEPT. 1, 1915.

NAME OF SCHOOL.	Opened.	Discontinued.
Beverly Evening Industrial School,	1907	1909
Waltham Evening Industrial School,	1907	1909
Brockton Evening Industrial School,	1908	1911
Pittsfield Evening Industrial School,	1908	1910
Lawrence Day Industrial School,	1909	1913
Watertown Evening Practical Arts School,	1911	1914
Northborough Vocational Agricultural Department, . .	1912	1913

TABLE No. 2. — *Financial statement, all types of schools: by cities, towns and counties.*

	I. GENERAL SUMMARY.				III. Total local non-taxation income (in agricultural departments one-half tuition claims only are entered).	IV. Net maintenance sum (no entry for departments).	Salaries of agricultural instructors.	V. Reimbursement due (one half net maintenance sum; or two thirds salary of instructor less one half tuition claims).
	Maintenance.	New construction.	New equipment.	Grand total of all expenditures.				
	(f)	(g)	(h)	(f, g, h) 25	9 or 10	f minus 9		
Ashfield IX.	\$1,213 10	\$75 00	—	\$1,288 10	\$240 00	—	\$975 00	\$410 00
Attleboro III.	164 37	—	\$110 05	274 42	14 00	\$150 37	—	75 19
Beverly I., II., III., IV., V., VI., VII.,	4,643 99	66 50	11 68	4,722 17	—	4,643 99	—	2,322 00
Boston I., II., III., IV., V., VI., VII.,	130,892 74	72,961 35	9,860 39	213,714 48	13,248 35	112,644 39	—	56,322 19
Brimfield IX.	1,137 87	—	99 11	1,236 98	75 00	—	938 25	583 84
Bristol VIII.	16,793 79	18,226 92	4,965 03	39,985 74	5,546 95	11,196 84	—	5,598 42
Cambridge II., III., VI.,	9,212 97	—	—	9,254 89	1,576 73	7,636 24	—	3,818 12
Chicopee III.,	1,397 41	—	5 25	1,402 66	—	1,397 41	—	698 70
Clinton IX.	1,139 44	—	—	1,139 44	360 00	—	840 00	200 00
Concord IX.	3,646 62	—	—	3,646 62	1,837 90	2,727 67	—	1,363 84
Danvers IX.	986 98	—	—	986 98	—	—	—	646 66
Dartmouth V., VIII.	25,734 34	2,347 36	923 26	29,004 96	1,411 46	24,322 88	970 00	12,161 44
Essex V., VIII.	1,584 49	—	25 56	1,610 05	44 43	1,340 06	—	12,770 03
Feverett III., VI.	2,511 60	—	443 24	2,954 84	—	2,511 60	—	1,255 80
Fall River III., VI., VII.,	1,053 00	—	101 90	1,154 90	167 50	—	820 00	379 17
Hadley IX.	1,139 74	—	—	1,139 74	207 50	—	1,049 94	492 46
Harwich IX.	14,830 52	6 75	1,931 90	16,819 17	549 02	14,281 50	—	7,140 75
Holyoke I., III., VI.,	9,868 98	—	631 49	12,479 03	1,227 08	—	—	4,320 95
Lawrence III., V., VI.,	20,075 28	1,978 61	1,275 37	21,350 65	5,677 69	14,397 59	—	7,198 80
Lovell I., III., V., VI.,	931 50	—	—	931 50	110 28	—	850 00	456 39
Marlborough IX.	88 74	—	—	88 74	—	88 74	—	44 37
Methuen VI.,	1,150 68	—	—	1,150 68	15 00	—	—	567 84
Natick VI.,	—	—	—	—	—	—	—	—

1 Income of Smith's Agricultural School is treated as a taxation item.

TABLE No. 2. — *Financial statement, all types of schools: by cities, towns and counties — Concluded.*

	I. GENERAL SUMMARY.				III. Total local non-taxation income ¹ (in agricultural departments one-half tuition claims only are entered).	IV. Net sum (no entry for departmental payments).	Salaries of agricultural instructors.	V. Reimbursement due (one half net maintenance sum; or two thirds salary of instructor less one half tuition claims).
	Maintenance.	New construction.	New equipment.	Grand total of all expenditures.				
	(f)	(g)	(h)	(f, g, h) 25	9 or 10	f minus 9		
New Bedford I., III., V., VI.,	\$30,466 24	\$2,850 26	\$5,685 38	\$39,001 88	\$5,685 59	\$24,780 65	-	\$12,390 33
Newton I., III., V., VI.,	39,193 04	484 30	1,026 79	40,704 13	6,222 55	32,990 49	-	16,485 25
Northampton I., V., VIII. ²	25,194 63	936 39	185 55	26,316 57	7,498 94	17,695 69	-	8,847 85
North Attleborough III., VI.,	1,304 81	-	147 58	1,452 39	27 50	1,277 31	-	637 66
Petersham IX.,	1,036 29	-	-	1,036 29	70 00	-	\$872 73	511 82
Quincy I., III., VI., ³	8,701 16	-	839 99	9,591 15	961 70	7,739 46	-	3,869 73
Reading IX.,	1,387 72	95 00	231 85	1,714 57	238 00	-	977 50	413 67
Somerville I., V., VI.,	14,153 73	44 18	285 02	14,482 93	2,565 44	11,588 29	-	5,794 15
Springfield I.,	14,889 61	675 92	2,885 36	18,450 89	1,956 54	12,933 07	-	6,466 54
Sutton IX.,	954 00	-	-	954 00	-	-	900 00	600 00
Taunton III., VI.,	587 98	-	-	587 98	-	587 98	-	293 99
Wakefield VI.,	622 32	-	5 46	627 78	120 00	507 32	-	251 16
Walpole VI.,	94 55	-	-	94 55	-	94 55	-	47 28
Westfield I., III.,	4,054 87	-	126 81	4,181 48	484 73	3,569 94	-	1,784 97
Worcester I., II., III., V., VI., ³	72,563 55	5,197 50	9,285 42	87,046 47	27,201 53	45,362 02	-	22,681 01
Total all schools,	\$465,452 45	\$105,946 04	\$41,331 36	\$612,729 85	\$90,341 41	\$366,438 63	\$9,243 42	\$187,902 37
Tuition paid for nonresidents,	-	-	-	60,025 24	-	-	-	30,012 62
State office administration,	-	-	-	17,115 57	-	-	-	-
Grand total cost to the municipalities and the State,	-	-	-	\$689,870 66	-	-	-	\$217,914 99

1 Income of Smith's Agricultural School is treated as a taxation item.

2 Reimbursement by special act.

3 Part-time school included in these figures.



TABLE NO. 5.—State-aided vocational agricultural education; examples of the income of pupils from farm work during attendance at school.

SCHOOL OR DEPARTMENT LOCATION.	Pupils' ages.	Project or projects (title and scope).	PUPILS' PROJECT ACCOUNTS.						OTHER FAMILY INCOME FROM PUPILS' PROJECTS.					CASH OR CREDIT RECEIVED BY PUPILS FROM FARM WORK DURING PROJECT PERIOD.						
			EXPENDITURES AND RECEIPTS.			NET PROFIT.			PUPILS' PROJECT BALANCE, INCREASED AMOUNTS PAID BELTER FOR LABOR TOTAL.		AMOUNTS.					GRAND TOTALS.				
			Total expenses (inventory, all labor, etc.).	Total receipts (inventory, produce, etc.).	Cash.	Total cash and credit.	Cash.	Total cash and credit.	Cash.	Total cash and credit.	Labor, man or horse.	Rent, seed, etc.	AMOUNTS.			At home.	Away from home.	Their own projects.	Cash.	Total cash and credit.
													Cash.	Total cash and credit.	Total cash and credit.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
Northampton,	19	200 poultry; 1/2 a. garden.	\$175 94	\$277 00	\$152 05	\$122 95	\$152 05	\$297 15	\$43 00	\$15 00	-	\$51 00	\$115 40	\$175 40	\$207 15	\$112 05	\$122 95	\$122 95		
"	19	1 a. potatoes, 25 apple trees; 50 poultry.	\$14 00	\$246 00	\$6 17	\$6 17	\$6 17	\$6 17	\$6 17	\$6 17	10 41	9 50	-	161 00	\$4 11	\$300 00	\$8 94	\$11 17		
"	19	1 a. potatoes; 1/2 a. fruit; 1/2 a. garden.	\$187 15	\$391 50	-	\$204 35	-	\$204 35	-	\$204 35	30 18	34 00	-	141 15	\$63 00	\$48 41	-	\$209 00		
"	19	1/2 a. potatoes; 20 apple trees; 1/2 a. garden; 30 poultry.	\$220 31	\$317 07	\$101 42	\$108 65	\$101 42	\$171 10	\$171 10	\$171 10	27 18	18 00	-	\$435 37	\$3 68	\$171 80	\$107 27	\$303 45		
"	10	1 a. corn; 1/2 a. potatoes, 15 apple trees (old and young).	\$168 00	\$205 00	-	\$37 00	-	\$37 00	-	\$37 00	58 58	14 00	-	72 58	\$155 40	75	\$110 02	-		
British County,	19	Poultry (7 ducks and R. I. Red chicks); 1 a. kitchen garden.	\$120 33	\$372 83	\$201 48	\$201 48	\$202 47	\$202 47	\$17 33	\$216 11	\$17 33	\$17 33	\$40 29	-	\$231 56	\$242 47	\$63 07	\$437 07		
"	19	24 White Leghorn pullets; 1 a. kitchen garden.	\$106 05	\$268 61	\$115 56	\$115 56	\$168 38	\$168 38	\$11 31	\$32 30	\$11 31	\$11 31	\$210 00	\$2 26	\$108 18	\$178 38	\$34 88	\$243 88		
"	19	30 R. I. Red hens, 1/2 a. kitchen garden.	\$177 80	\$210 33	\$121 63	\$123 63	\$145 57	\$147 57	9 17	\$73 22	0 17	\$8 40	\$246 00	\$6 00	\$147 57	\$231 57	\$231 57	\$231 57		
"	15	1/2 a. kitchen garden; 20 R. I. Red hens.	\$142 85	\$198 72	\$77 47	\$77 47	\$141 44	\$141 44	1 10	\$13 32	1 10	\$12 12	\$195 75	1 25	\$101 44	\$201 44	\$201 44	\$201 44		
"	16	20 White Wyandotte pullets.	\$1 74	\$2 35	-	-\$9 00	-	0 00	-	0 00	-	-	-	\$100 00	\$100 00	0 00	-\$90 00	\$100 00		
East County,	19	Dairying and farm work.	\$680 00	\$753 13	\$209 15	\$209 15	\$209 15	\$209 15	\$26 96	\$236 10	\$26 96	-	\$101 96	-	\$250 00	\$256 40	\$40 15	\$508 40		
"	18	Poultry; avian; garden.	\$111 36	\$110 31	-	\$75 85	\$4 35	\$133 45	-	-	-	-	-	\$200 00	\$2 31	\$133 45	\$105 56	\$405 10		
"	16	16 pullets; 21 hens.	\$206 05	\$265 65	-	\$300 40	\$4 35	\$304 75	\$8 00	-	-	-	\$90 00	-	\$100 00	\$4 25	\$300 00	\$300 00		
"	19	40,000 sq. ft. vegetable garden; 210 pullets; 68 hens.	\$48 49	\$70 39	\$40 45	\$171 20	\$165 35	\$317 90	-	-	-	-	-	-	\$117 50	\$165 25	\$317 00	\$317 00		
"	21	Poultry (82 hens, 135 chicks).	\$123 16	\$320 67	\$130 00	\$130 00	\$130 00	\$130 00	-	-	-	-	-	\$102 14	1 75	\$162 50	\$207 30	\$207 30		
Hadley,	19	20 fruit trees. 1 a. tobacco.	\$123 16	\$303 80	\$140 64	\$140 64	\$203 14	\$203 14	\$27 00	\$222 60	\$15 00	\$80 00	\$200 00	\$3 00	\$209 14	\$255 14	\$255 14	\$255 14		
"	19	2 a. field corn.	\$100 01	\$176 40	-	\$40 39	-	\$40 39	-	\$40 39	7 75	21 00	-	\$92 58	\$126 00	\$73 10	\$0 00	\$283 30		
"	15	1 pig; 1/2 a. onion; 1 a. corn.	\$79 32	\$124 94	\$5 00	\$8 52	\$5 00	\$100 52	\$5 50	\$7 50	-	-	\$130 75	\$5 50	\$60 00	\$101 82	\$1 50	\$211 32		
"	17	1/2 a. onion; 1/2 a. kitchen garden; 11 fruit trees.	\$44 06	\$77 39	\$30 10	\$33 30	\$33 30	\$61 30	3 00	\$2 00	-	-	\$60 00	\$6 00	\$65 00	\$21 12	\$126 12	\$178 06		
"	15	1/2 a. onion.	\$60 25	\$131 30	\$5 05	\$8 65	\$5 05	\$9 10	4 30	\$3 75	-	-	\$45 55	\$7 00	\$5 00	\$10 00	\$0 00	\$100 10		
Petersham,	17	1/2 a. garden; 150 hens.	\$870 54	\$1,052 70	\$368 19	\$445 19	\$368 19	\$445 19	\$42 39	\$10 00	\$90 00	-	\$60 00	\$9 55	\$6 45	\$432 50	\$306 67	\$739 12		
Herwick,	19	1 a. garden; 150 hens.	\$75 02	\$49 00	\$9 70	\$115 11	\$109 01	\$311 61	5 00	\$10 00	-	-	\$10 00	\$17 20	\$1 41	\$131 41	\$122 92	\$122 92		
"	16	1/2 a. garden; 60 hens.	\$90 65	\$175 40	\$21 29	\$71 14	\$71 14	\$21 29	-	\$60 00	-	-	-	\$25 35	-	\$60 00	\$23 80	\$23 80		
"	16	1/2 a. garden; 20 hens.	\$12 16	\$140 16	\$60 00	\$60 00	\$60 00	\$60 00	0 00	\$12 00	-	-	\$18 00	\$18 73	-	\$60 00	\$19 43	\$208 73		
"	14	1/2 a. garden; 25 hens.	\$11 11	\$132 22	\$30 61	\$31 11	\$31 11	\$31 11	-	-	-	-	-	\$1 90	-	\$1 90	\$2 51	\$100 41		
Easton,	15	Poultry; garden.	\$144 70	\$254 70	-	\$100 00	-	\$100 00	1 00	\$2 10	-	-	\$15 15	\$7 70	-	\$144 00	\$4 00	\$209 70		
"	17	Poultry; garden, long.	\$5 20	\$70 60	-	\$245 45	-	\$245 45	-	\$24 55	-	-	\$1 00	\$1 00	-	\$130 00	\$43 50	\$267 55		
"	16	Poultry; garden, long.	\$7 00	\$129 00	\$9 00	\$22 00	\$9 00	\$105 00	2 50	\$6 00	-	-	\$8 50	\$1 00	\$2 00	\$105 20	\$115 00	\$115 20		
"	16	Poultry; garden, long.	\$4 25	\$72 10	-	\$7 55	-	\$7 55	-	\$5 35	-	-	\$2 00	\$5 00	\$5 00	\$5 25	\$120 25	\$120 25		
"	15	Poultry; garden, long.	\$7 00	\$109 50	-	\$110 00	-	\$126 50	-	-	-	-	\$18 00	-	\$18 00	-	\$144 50	\$144 50		
Brimfield,	20	110 chicks; 1/2 a. garden; 20 apple trees; 6 ewes.	\$1,052 58	\$1,302 70	-	\$232 21	-	\$414 78	\$9 75	\$6 50	-	-	\$146 66	\$44 64	\$4 05	\$414 78	-	\$753 47		
"	17	450 chicks; 60 hens; 1/2 a. garden.	\$274 32	\$774 30	-	\$329 98	-	\$472 82	6 00	\$3 00	-	-	\$149 20	\$20 75	\$75 45	\$472 82	-	\$752 82		
"	19	10 hens; 1 rooster; 25 chicks; 1/2 a. potatoes.	\$108 10	\$135 01	-	\$31 29	-	\$63 45	\$4 74	\$11 60	-	-	\$13 41	\$26 12	\$9 10	\$63 45	-	\$63 45		
"	18	3 pigs; 2 calves; 2 trained steers.	\$155 13	\$266 00	-	\$108 87	-	\$158 28	2 49	\$9 24	-	-	\$27 33	\$23 58	\$2 68	\$158 28	-	\$157 16		
"	14	72 chicks; 10 hens; 1 rooster; 1/2 a. strawberries; 1/2 a. potatoes.	\$73 19	\$104 66	-	\$31 47	-	\$63 78	2 65	\$2 75	-	-	\$4 00	\$13 70	\$1 12	\$63 78	-	\$214 26		
Ashtabula,	19	1/2 a. corn; 350 trees.	\$2,123 82	\$2,518 00	\$206 25	\$394 15	\$306 25	\$478 35	\$45 00	\$45 00	-	-	\$135 50	\$148 00	\$2 50	\$478 35	\$388 75	\$608 88		
"	19	1 a. corn; 1/2 a. garden; 1/2 a. potatoes; but had 8 x 9 ft. 11 trees.	\$384 55	\$528 35	\$7 58	\$138 80	\$7 58	\$271 80	\$10 44	\$11 00	-	-	\$23 41	\$1 22	\$63 88	\$271 80	\$101 70	\$476 57		
"	16	1/2 a. potatoes; 72 trees.	\$552 87	\$620 50	2 33	\$63 03	2 33	\$83 63	6 00	\$7 55	-	-	\$14 45	\$70 66	\$4 00	\$83 63	\$29 74	\$468 99		
"	16	1 a. garden; 45 hens.	\$453 23	\$581 29	\$17 62	\$125 66	\$17 62	\$162 76	\$10 90	\$10 50	-	-	\$21 50	\$165 15	\$2 85	\$162 76	\$25 27	\$354 07		
"	17	39 trees.	\$1,806 83	\$2,124 65	\$3 92	\$237 82	\$3 92	\$232 42	-	-	-	-	-	1 84	\$1 79	\$232 42	\$5 31	\$240 25		
Sutton,	19	Dairy records; 110 mature apple trees.	\$760 85	\$625 00	-	\$135 85	-	\$173 15	\$8 45	\$5 00	-	-	\$133 43	\$20 85	\$2 25	\$173 15	-	\$509 25		
"	19	Mixed breeds of poultry.	\$200 43	\$233 60	\$21 17	\$24 17	\$21 17	\$45 57	\$29 65	\$11 50	-	-	\$41 30	\$50 10	\$7 25	\$145 92	\$1 42	\$191 92		
"	19	Poultry—White Leghorns.	\$192 09	\$213 50	\$21 50	\$21 50	\$21 50	\$42 50	-	\$11 00	-	-	\$11 00	\$30 10	\$7 15	\$42 50	\$6 98	\$168 03		
"	19	25 young apple trees.	\$85 75	\$162 00	-	\$16 75	-	\$29 00	-	\$5 50	-	-	\$5 50	\$7 10	\$4 13	\$29 00	\$9 66	\$9 66		
"	16	11 mature apple trees.	\$68 20	\$67 75	-	-\$45 00	-	0 00	-	0 00	-	-	\$3 50	\$4 00	\$2 10	\$5 00	\$0 00	\$2 10		
Cum gratia,	19	23 hens; 60 chicks.	\$131 07	\$191 12	\$2 49	\$6 45	\$6 03	\$4 10	3 00	-	-	-	\$30 00	\$27 00	\$6 00	\$49 19	\$8 53	\$58 09		
"	17	21 hens; 20 chicks; 1/2 a. peas.	\$195 90	\$297 24	\$84 45	\$100 34	\$115 83	\$120 78	\$19 45	-	-	-	\$19 45	\$84 90	-	\$10 74	\$115 88	\$364 94		
"	20	173 hens; 150 chicks; 1/2 a. garden.	\$689 80	\$902 11	\$9 27	\$89 27	\$144 54	\$144 51	-	-	-	-	\$49 00	-	\$104 54	\$62 54	\$262 54	\$262 54		
"	15	1/2 a. garden; 60 hens; 60 chicks.	\$117 00	\$245 70	\$30 94	\$100 76	\$114 01	\$114 91	3 00	\$5 00	\$5 00	\$6 00	\$6 00	\$21 00	\$1 05	\$114 01	\$145 56	\$260 57		
"	15	1/2 a. garden; 40 hens; 40 chicks.	\$117 00	\$245 70	\$30 94	\$100 76	\$114 01	\$114 01	3 00	\$5 00	\$5 00	\$6 00	\$6 00	\$21 00	\$1 05	\$114 01	\$145 56	\$260 57		
Marblehead,	17	39 0/2 a. pea, vegetable garden.	\$20 15	\$111 60	\$22 55	\$77 69	\$12 07	\$63 07	-	-	-	-	\$2 00	\$6 47	\$8 20	\$13 79	\$7 27	\$201 53		
"	14	60 7/2 a. pea, vegetable garden; 60 hens.	\$162 40	\$255 23	\$23 69	\$138 69	\$65 04	\$127 64	3 70	-	-	-	\$39 10	\$4 00	\$20 12	\$44 20	\$248 97	\$248 97		
"	16	2 a. vegetable garden.	\$30 78	\$125 48	\$1 70	\$73 70	\$22 64	\$69 32	-	-	-	-	\$17 46	\$1 15	\$9 52	\$2 97	\$28 08	\$28 08		
"	16	1/2 a. vegetable garden; 1/2 a. flower garden; 21 hens.	\$461 88	\$717 35	\$30 00	\$30 00	\$70 00	\$70 00	9 00	-	-	-	\$9 00	\$2 13	\$1 75	\$70 00	\$25 13	\$308 13		
"	14	1 a. garden; 73 hens.	\$220 30	\$250 46	-	\$24 07	\$2 53	\$43 52	3 50	-	-	-	\$5 00	\$10 40	\$1 00	\$42 42	\$4 13	\$161 43		
Clinton,	19	Poultry; 1 a. squash.	\$63 21	\$200 36	\$1 28	\$36 15	\$1 28	\$429 70	4 13	\$5 00	-	-	\$48 10	\$60 00	\$6 00	\$429 70	\$6 23	\$511 63		
"	16	Poultry; 1/2 a. squash.	\$166 76	\$168 01	\$33 00	\$60 35	\$33 00	\$77 15	\$4 50	-	-	-	\$50 32	\$45 75	\$4 35	\$77 15	\$45 40	\$45 40		
"	16	Poultry; 1/2 a. potatoes.	\$160 70	\$267 78	\$73 07	\$107 68	\$73 07	\$132 68	-	\$2 50	-	-	\$2 50	\$41 75	\$14 82	\$132 68	\$19 49	\$49 50		
"	16	Poultry; 1/2 a. vegetables.	\$204 70	\$219 16	\$14 46	\$14 46	\$14 46	\$45 46	1 30	\$1 00	-	-	\$2 50	\$94 30	-	\$2 50	\$1 44	\$406 96		
"	16	Poultry; 1/2 a. corn.	\$204 99	\$282 40	\$6 84	\$77 60	\$5 84	\$100 24	2 40	1 70	-	-	1 00	\$12 82	\$2 00	\$100 24	\$7 16	\$263 68		
Rosenda,	19	2 grade cows; 1 heifer, 1/2 a. garden; 150 hens.	\$1,145 60	\$1,454 30	\$24 01	\$21 70	\$21 01	\$21 01	\$60 30	\$6 10	\$14 70	\$14 70	\$22 86</							

TABLE NO. 4.—*Prizes won in 1915.—Summary for all vocational agricultural school and department pupils.*

LOCATIONS OF SCHOOLS AND DEPARTMENTS.	JUDGING CONTESTS.				OTHER CONTESTS.	Total won.
	Corn.	Vege- tables.	Poultry.	Live stock.	Products of projects, etc.	
<i>Schools.</i>						
Northampton,	\$3 00	\$8 00	-	\$22 00	\$41 00 ¹	\$74 00
Bristol County,	-	-	-	-	166 25 ²	166 25
Essex County,	-	-	-	10 00	40 75	50 75
<i>Departments.</i>						
Petersham,	-	-	-	-	1 00	1 00
Hadley,	5 00	6 00	\$3 25	30 00	35 50 ³	79 75
Harwich,	-	-	-	-	25 25	25 25
Easton,	-	-	-	-	21 00	21 00
Brimfield,	8 00	-	-	36 00	41 75	85 75
Ashfield,	6 25	3 50	-	35 00	12 00	56 75
Sutton,	-	-	-	-	-	-
Concord,	-	-	-	-	26 85	26 85
Marlborough,	-	1 00	-	-	63 00	64 00
Clinton,	-	2 00	-	-	13 50	15 50
Reading,	-	-	-	-	5 55	5 55
Totals,	\$22 25	\$20 50	\$3 25	\$133 00	\$493 40	\$672 40

¹ Eight dollars of this amount was won for horsemanship.² This includes value of three cups, \$52.³ Of this amount, \$10 was won for plowing and \$7 for teaming.

TABLE No. 6. — *Earnings of vocational agricultural pupils from farm work and other work during the periods covered by their school attendance and their farming projects.*

VOCATIONAL AGRICULTURAL SCHOOLS OR DEPARTMENTS.	1912.				1913.			
	ENROLLMENT.		EARNINGS.		ENROLLMENT.		EARNINGS.	
	Boys.	Girls.	Total.		Boys.	Girls.	Total.	
SCHOOLS.								
Northampton,	16	—	16	\$2,653 96	25	—	25	\$2,672 52
Bristol County,	—	—	—	—	—	—	—	—
Essex County,	—	—	—	—	—	—	—	—
DEPARTMENTS.								
Petersham,	10	1	11	1,125 74	14	—	14	2,999 97
Hadley,	12	—	12	3,626 90	9	—	9	1,891 96
Northborough, ¹	13	3	16	1,783 80	10	2	12	3,138 49
Harwich,	15	—	15	563 88	8	—	8	2,208 20
Easton,	—	—	—	—	20	1	21	2,488 76
Brimfield, ²	—	—	—	—	—	—	—	—
Ashtfield,	—	—	—	—	—	—	—	—
Sutton,	—	—	—	—	—	—	—	—
Concord,	—	—	—	—	—	—	—	—
Marlborough,	—	—	—	—	—	—	—	—
Clinton,	—	—	—	—	—	—	—	—
Reading,	—	—	—	—	—	—	—	—
Totals,	66	4	70	\$9,754 28	86	3	89	\$15,399 90
				\$1,345 89				\$2,582 61
				\$11,100 17				\$17,982 51

¹ Headquarters moved November, 1913, from Northborough to the more convenient transportation point at Marlborough.² Brimfield Agricultural School became an agricultural department in Hittchook Free Academy, Brimfield, Jan. 1, 1915.

TABLE NO. 7. — *Vital statistics by types of schools and departments.**Group I. Day industrial schools (boys).*

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Beverly: —	1	1						
Machine shop,			63	—	41	49	.984	41
Total for school,	1	1	63	—	41	49	.984	41
Boston: ¹ —	1	1						
Academic,			—	—	—	—	—	—
Electrical,			91	5	48	55.8	.96	21
Machine shop practice,			53	—	22	33.1	.90	6
Printing,			46	—	28	32	.85	5
Sheet metal work,			25	1	13	14.2	.89	—
Woodworking,			60	1	34	37.1	.91	8
Total for school,	1	1	275	7	145	172.2	.91	40
Holyoke: —	1	1						
Carpentry and building,			24	2	8	17.5	.925	—
Machine shop practice,			32	—	20	23.9	.966	—
Pattern making,			16	1	10	14.4	.951	—
Printing and binding,			23	—	11	17.4	.94	—
Total for school,	1	1	95	3	49	73.2	.95	—
Lowell: —	1	1						
Automobile,			49	12	24	32.8	.93	—
Carpentry,			39	10	19	25	.92	—
Electrical,			28	15	13	20.8	.89	—
Machine shop practice,			44	18	25	30.2	.94	—
Related and general work,			—	—	—	—	—	—
Shop science,			—	—	—	—	—	—
Total for school,	1	1	160	55	81	108	.92	—
New Bedford: —	1	1						
Carpentry,			64	11	33	36	.92	2
Electrical,			77	12	48	49	.89	2
Machine shop practice,			78	13	25	40	.90	1
Steam practice,			29	4	13	18	.94	—
Total for school,	1	1	243	40	119	143	.91	5
Newton: —	1	1						
Cabinet making,			33	7	19	— ³	— ³	—
Electrical,			63	2	47	— ³	— ³	—
Machine shop practice,			83	16	55	— ³	— ³	6
Pattern making,			15	7	14	— ³	— ³	4
Printing,			35	2	24	— ³	— ³	—
Total for school,	1	1	229	34	159	192.6	.93	10

¹ "Membership at close of year" and "withdrawals during the year" in each department do not equal the total enrollment for the department, since in some cases pupils are transferred from one department to another during the year. The totals under the two above-named headings agree with the total enrollment for the school.

TABLE No. 7. — *Vital statistics by types of schools and departments.**Group I. Day industrial schools (boys)*

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.										
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTERING INDUSTRY TRAINED FOR.		Number of withdrawals not entering industry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership X total hours).
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrew voluntarily.	Discharged for cause.				
41	-	-	21	-	3	3	2	4	2,000	98,000
41	-	-	21	-	3	3	2	4	2,000	98,000
-	-	-	-	-	-	-	-	2	-	-
14	5	2	3	1	11	8	4	4	1,300	72,540
4	2	-	4	-	16	5	6	2	1,300	43,030
3	2	-	-	-	11	2	6	1	1,300	41,600
-	-	-	-	-	10	2	9	1	1,300	18,460
4	2	2	2	1	10	4	8	2	1,300	48,230
25 ²	11 ²	4 ²	.9	2	58	21	33	12	6,500	223,860
-	-	-	4	1	11	-	5	1	1,300	22,750
-	-	-	-	2	10	-	7	2	1,300	31,070
-	-	-	1	-	5	-	-	1	1,300	18,720
-	-	-	-	3	9	-	2	1	1,300	22,620
-	-	-	5	6	35	-	14	5	5,200	95,160
-	-	-	5	-	20	-	12	2	1,300	42,640
-	-	-	2	-	16	2	12	2	1,300	32,500
-	-	-	3	-	12	-	1	2	1,300	27,040
-	-	-	13	-	6	-	4	2	1,300	39,260
-	-	-	-	-	-	-	-	1	-	-
-	-	-	-	-	-	-	-	1	-	-
-	-	-	23	-	54	2	29	10	5,200	141,440
2	-	-	7	3	12	9	17	5	1,300	46,800
2	-	-	3	7	13	6	15	5	1,300	63,700
-	1	-	5	7	35	6	27	5	1,300	52,000
-	-	-	-	2	11	3	10	5	1,300	23,400
4	1	-	15	19	71	24	69	14	5,200	185,900
-	-	-	-	1	11	2	6	8	1,333 ¹ / ₃	- ³ / ₃
-	-	-	3	1	12	-	8	9	1,333 ² / ₃	- ³ / ₃
5	1	-	2	7	18	1	19	10	1,333 ² / ₃	- ³ / ₃
3	1	-	1	-	-	-	1	8	1,333 ² / ₃	- ³ / ₃
-	-	-	2	-	9	-	3	4	1,333 ² / ₃	- ³ / ₃
8	2	-	8	9	50	3	37	16	6,667	256,800

² Graduates have been considered as withdrawals.³ No data.

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group I. *Day industrial schools (boys)* — Continued.

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Northampton: —	1	1						
Carpentry,			42	14	28	31.5	.97	5
Total for school,	1	1	42	14	28	31.5	.97	5
Quincy: ¹ —	1	1						
Co-operative school.								
Coppersmithing,			2	1	1	1.5	.90	1
Gear construction,			2	1	2	2	.84	—
Joinery,			8	1	5	7.06	.85	3
Machine shop practice, . . .			16	3	14	15	.87	12
Mold loft,			5	—	5	5	.84	5
Sheet metal,			5	1	3	4	.83	—
Ship plumbing,			3	1	3	3	.83	1
Telephone,			15	—	9	11.68	.90	1
Total for school,	1	1	56	8	42	49.2	.85	23
Full-time school.	1	1						
Cabinet making,			4	—	4	4	.90	—
Carpentry,			3	—	3	3	.94	—
Electrical,			25	—	18	18	.94	—
Joinery,			5	—	5	5	.96	—
Pattern making,			9	1	6	7.5	.96	—
Total for school,	1	1	46	1	36	37.5	.94	—
Somerville: —	1	1						
Cabinet making,			22	4	12	17	.88	3
Carpentry,			16	1	5	7	.86	—
Machine shop practice, . . .			47	6	30	36	.92	7
Total for school,	1	1	85	11	47	60	.88	10
Springfield: —	1	1						
Cabinet making,			9	—	7	7.4	.96	1
Carpentry,			26	6	14	15	.95	—
Pattern making,			13	—	9	9.1	.95	1
Machine shop practice, . . .			84	11	52	60.3	.95	6
Printing,			21	1	11	13.4	.97	—
Total for school,	1	1	153	18	93	105.2	.96	8
Westfield: —	1	1						
Machine shop practice, . . .			50	5	26	38	.92	8
Total for school,	1	1	50	5	26	38	.92	8

¹ Part-time school included in these figures.

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group I. *Day industrial schools (boys)* — Continued.

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.										
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTERING INDUSTRY TRAINED FOR.		Number of withdrawals not entering industry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership X total hours).
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrawn voluntarily.	Discharged for cause.				
5	-	-	-	1	6	7	12	4	1,170	36,855
5	-	-	-	1	6	7	12	4	1,170	36,855
1	-	-	-	-	-	1	-	1	1,470	2,205
3	-	-	-	-	-	-	1	1	1,470	2,940
12	-	-	1	-	1	1	-	1	1,470	10,378.2
5	-	-	-	-	-	-	-	1	1,470	22,050
1	-	-	-	-	2	-	1	1	1,470	7,350
1	-	-	-	-	-	-	1	1	1,470	5,880
	-	-	1	-	5	-	4	1	1,470	4,410
									1,470	17,169.6
23	-	-	2	-	8	4	6	3	11,760	72,382.8
-	-	-	-	-	-	-	-	1	1,250	5,000
-	-	-	-	-	-	-	-	1	1,250	3,750
-	-	-	3	-	2	2	4	2	1,250	22,500
-	-	-	1	-	-	-	-	1	1,250	6,250
					2	-	2	1	1,250	9,375
-	-	-	4	-	4	2	6	4	6,250	46,875
1	2	-	2	1	6	-	7	1	1,300	22,100
-	-	-	1	1	8	-	9	1	1,300	9,100
7	-	-	-	2	15	2	19	2	1,300	46,800
8	2	-	3	4	29	2	35	4	3,900	78,000
1	-	-	1	1	-	-	-	3	1,400	10,360
-	-	-	4	5	2	1	1	3	1,400	21,000
1	-	-	1	1	2	-	-	3	1,400	12,740
6	-	-	10	7	15	-	7	4	1,400	84,000
-	-	-	3	3	4	-	2	2	1,400	18,760
8	-	-	19	17	23	1	10	8	7,000	146,860
8	-	-	4	3	11	6	16	2	1,470	55,860
8	-	-	4	3	11	6	16	2	1,470	55,860

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group I. *Day industrial schools (boys)* — Concluded.

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Worcester: ¹ —	1	1	—	—	—	—	—	—
Academic,								
Cabinet making,			79	15	63	64	.92	7
Carpentry,			42	9	25	28	.89	2
Drafting,			65	19	49	56	.92	2
Electrical,			67	7	43	50	.94	—
Machine shop practice,			117	39	79	84	.95	10
Painting and decorating,			11	1	9	6	.83	—
Pattern making,			51	4	40	46	.91	5
Printing,			43	7	23	24	.91	—
Steam engineering,			70	18	50	56	.89	—
Total for school,	1	1	545	119	381	414	.92	26
Total for type of school,	13	13	2,052	315	1,247	1473.4	.926	176

Group II. *Day industrial schools (girls).*

Boston: ² —	1	1						
Catering,			34	7	14	— ⁴	— ⁴	— ³
Dressmaking,			511	95	257	— ⁴	— ⁴	— ³
Millinery,			135	9	69	— ⁴	— ⁴	— ³
Power machine operating (cloth),			57	3	27	— ⁴	— ⁴	— ³
Power machine operating (straw),			35	4	14	— ⁴	— ⁴	— ³
Related work,			—	—	—	—	—	— ³
Total for school,	1	1	772	118	381	459	.89	—
Cambridge: —	1	1						
Cooking,			21	—	15	13.1	.80	3
Dressmaking,			100	1	68	54	.93	15
Total for school,	1	1	121	1	83	67.1	.87	18
Worcester: —	1	1						
Cooking,			19	7	15	16.19	.89	—
Dressmaking,			215	23	162	169	.92	43
Millinery,			28	4	21	22	.98	6
Power machine operating,			39	3	21	26	.93	9
Total for school,	1	1	301	37	219	233.19	.93	58
Total for type of school,	3	3	1,194	156	683	759.2	.896	76

¹ Part-time school included in these figures.² "Membership at close of year" and "withdrawals during the year" in the different departments do not equal the total enrollment for the department, since in some cases pupils are transferred from one department to another during the year, but the totals under the two above-named headings do agree with the total enrollment for the school.

TABLE NO. 7. — *Vital statistics, etc.* — Continued.Group I. *Day industrial schools (boys)* — Concluded.

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.							Number of withdrawals not entering industry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership × total hours).
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTERING INDUSTRY TRAINED FOR.					
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrew voluntarily.	Discharged for cause.				
5	2	-	1	-	14	1	-	3	1,878	120,192
2	-	-	-	-	17	-	-	1	1,878	52,584
1	1	-	5	3	8	-	-	3	1,878	105,168
10	-	-	2	-	22	-	-	2	1,878	93,900
-	-	-	10	5	22	1	-	4	1,878	157,752
-	-	-	-	-	2	-	-	1	1,878	11,268
5	-	-	1	-	10	-	-	2	1,878	86,388
-	-	-	1	2	17	-	-	1	1,878	45,072
-	-	-	1	-	19	-	-	2	1,878	105,168
23	3	-	21	10	131	2	-	27	16,902	777,492
153	19	4	134	71	483	77	269	113	79,219	2,215,484.8

Group II. *Day industrial schools (girls).*

6	-	-	3 ⁵	1	6	4	1	2	1,860	- ⁴
95	-	-	18 ⁵	27	95	19	22	17	1,860	- ⁴
17	-	-	2 ⁵	10	29	8	6	4	1,860	- ⁴
16	-	-	2 ⁵	3	8	1	2	3	1,860	- ⁴
1	-	-	2 ⁵	1	15	2	2	2	1,860	- ⁴
-	-	-	-	-	-	-	-	5	-	-
135	-	-	27 ⁵	42	153	34	33	33	9,300	853,740
3	-	-	1	2	3	-	-	3	1,400	18,340
15	-	-	-	-	32	-	-	5	1,400	75,600
18	-	-	1	2	35	-	-	8	2,800	93,940
-	-	-	-	-	4	-	1	6	1,740	28,170
10	33	-	-	3	50	-	17	17	1,740	283,970
6	-	-	-	-	5	-	3	2	1,740	38,280
9	-	-	2	3	10	-	11	3	1,740	45,240
25	33	-	2	6	69	-	32	28	6,960	395,660
178	33	-	30	50	257	34	65	69	19,060	1,343,340

³ Graduates have been considered as withdrawals.⁴ No data.⁵ Self-placed.

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group III. *Evening industrial schools (men).*

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Attleboro: —	1	1						
Designing and hub cutting, . . .			17	2	8	14	.60	—
Tool making, . . .			16	—	3	11.52	.70	—
Total for school, . . .	1	1	33	2	11	25.52	.64	—
Boston: —	1	4						
Drawing for carpenters, . . .			52	—	26	34	.74	—
Drawing for illustrators, . . .			33	1	16	18	.78	—
Drawing for machinists, . . .			112	1	52	71	.73	—
Electrical, . . .			64	3	17	32	.75	—
First, second and third-class li- cense work for engineers, fire- men and janitors, . . .			34	—	21	14	.79	—
Industrial design, . . .			17	—	12	15	.74	—
Interior decorating, . . .			26	1	18	21	.62	—
Machine shop practice, . . .			159	6	90	100	.83	—
Printing, . . .			40	6	17	21	.76	—
Sheet metal drafting, . . .			12	—	6	7	.72	—
Sheet metal work, . . .			45	7	19	33	.73	—
Ship drafting, . . .			4	—	3	3	.67	—
Structural steel design, . . .			1	—	1	1	100	—
Wood working, . . .			19	—	9	12	.83	—
Total for school, . . .	1	4	618	25	307	382	.76	—
Cambridge: —	1	1						
Architectural drawing, . . .			26	—	11	14	.70	4
Estimating (building trades), . .			14	2	7	8	.75	1
Forging, . . .			27	—	9	12	.75	—
Machine shop practice, . . .			72	—	23	34	.76	—
Mechanical drawing, . . .			30	—	10	17	.70	2
Pattern making, . . .			36	—	8	15	.73	1
Printing, . . .			23	—	10	12	.75	7
Total for school, . . .	1	1	228	2	78	112	.74	15
Chicopee: —	1	1						
Automobile, . . .			18	—	14	14	.86	—
Machine drawing, . . .			10	—	9	9	.90	—
Machine shop practice, . . .			22	—	17	17	.88	—
Reading working drawings, . . .			3	—	3	3	100	—
Total for school, . . .	1	1	53	—	43	43	.91	—
Everett: —	1	1						
Electrical, . . .			23	—	18	20	.85	—
Gasoline engineering, . . .			33	—	21	20	.85	—
Machine drawing and arithmetic, .			18	—	9	10	.90	—
Machine shop practice, . . .			18	—	9	10	.90	—
Shop drawing, . . .			16	—	— ¹	10	.80	—
Total for school, . . .	1	1	108	—	57	70	.86	—

¹ Closed.

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group III. *Evening industrial schools (men).*

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.										
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTERING INDUSTRY TRAINED FOR.		Number of withdrawals not entering industry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership X total hours).
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrew voluntarily.	Discharged for cause.				
								1	56	784
								1	56	645.12
								2	112	1,429.12
								4	132	4,488
								1	132	2,376
								7	132	9,372
								3	132	4,224
								1	132	1,848
								1	132	1,980
								1	132	2,772
								7	132	13,200
								2	132	2,772
								1	132	924
								2	132	4,356
								1	132	396
								1	132	132
								1	132	1,584
								33	1,848	50,924
								1	120	1,680
								1	120	960
								1	120	1,440
								3	120	4,080
								1	120	2,040
								1	120	1,800
								1	120	1,440
								9	840	13,440
								1	96	1,344
								1	96	864
								1	96	1,632
								1	24	72
								4	312	3,912
								3	120	2,400
								2	120	2,400
								1	120	1,200
								1	120	1,200
								1	120	1,200
								8	600	8,400

TABLE NO. 7. — *Vital statistics, etc.* — Continued.
Group III. Evening industrial schools (men) — Continued.

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Fall River: —	1	1						
Blueprint reading,			9	-	8	7	100	-
Carpentry,			12	-	7	10	.80	-
Plumbing,			15	-	14	14	.86	-
Printing,			13	-	12	12	.58	-
Total for school,	1	1	49	-	41	43	.79	-
Holyoke: —	1	1						
Bricklaying,			17	1	9	5	.80	-
Cabinet making and pattern making,			17	-	7	8.5	.588	-
Carpentry and building,			50	-	18	21.4	.794	-
Decorative plastering,			9	-	8	8	.775	-
Electrical,			33	-	14	14.9	.724	-
Machine shop practice,			78	-	53	60.8	.848	-
Paper making,			33	2	16	22	.395	-
Printing and binding,			45	2	16	20.3	.729	-
Steam engineering,			70	4	37	31.3	.638	-
Total for school,	1	1	352	9	178	192.2	.718	-
Lawrence: —	1	2						
Cabinet making,			21	-	8	15	.80	-
Carpentry,			19	1	8	11	.82	-
Cotton carding,			8	1	3	5	.60	-
Cotton carding, foreign,			15	-	13	14	.86	-
Cotton spinning,			10	2	5	9	.78	-
Designing,			27	6	10	19	.52	-
Drafting,			40	6	19	18	.50	-
Electricity,			31	8	18	11	.92	-
Engineering,			31	-	10	12	.83	-
Firing, including afternoon class, Loom fixing,			73	8	25	36	.89	-
Machine shop practice,			53	6	19	11	.90	-
Worsted spinning,			41	6	23	14	.86	-
Worsted spinning, foreign,			23	6	8	12	.83	-
Total for school,	1	2	404	50	173	199	.75	-
Lowell: —	1	3						
Automobile,			37	3	9	14.5	.69	-
Carpentry,			3	-	-	-	-	-
Electrical,			20	1	4	7.5	.70	-
Machine, advanced,			80	4	18	13	.67	-
Machine, elementary,			88	5	35	15	.73	-
Plumbing,			87	4	16	17	.71	-
Total for school,	1	3	315	17	82	67	.70	-

TABLE No. 7. — *Vital statistics, etc.* — Continued.
Group III. Evening industrial schools (men) — Continued.

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.							Number of withdrawals not entering in- dustry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership × total hours).
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTER- ING INDUSTRY TRAINED FOR.					
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrawn voluntarily.	Discharged for cause.				
1 										

TABLE No. 7. — *Vital statistics, etc.* — Continued.
 Group III. *Evening industrial schools (men)* — Continued.

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
New Bedford: —	1	1						
Architectural drawing,			15	—	12	13	.69	—
Automobile,			40	—	16	19	.78	—
Carpentry,			34	1	11	21	.67	—
Electrical,			59	—	22	27	.70	—
Gasoline engineering,			16	—	9	12	.92	—
Machine drafting,			20	1	7	12	.75	—
Machine shop practice,			49	2	28	32	.87	—
Plumbing,			48	1	26	29	.69	—
Steam practice,			126	1	63	75	.76	—
Total for school,	1	1	407	6	194	240	.76	—
Newton: —	1	1						
Architectural drawing,			31	3	14	18.86	.74	5
Electrical,			17	2	7	5.76	.76	—
Machine shop practice,			50	17	23	31.2	.84	21
Mechanical drawing,			19	2	8	11.94	.79	8
Total for school,	1	1	117	24	52	67.8	.80	34
North Attleborough: —	1	1						
Coloring,			7	—	5	5.5	.84	—
Engraving,			10	—	7	8	.75	—
Jewelry,			11	—	7	7	.71	—
Total for school,	1	1	28	—	19	20.5	.77	—
Quincy: —	1	2						
Blueprint reading and drawing for electricians (advanced),			18	1	12	14	.79	—
Blueprint reading and drawing for electricians (beginners),			14	—	11	14	.79	—
Drawing and blueprint reading for machinists (advanced),			31	3	21	24	.79	—
Drawing and blueprint reading for machinists (beginners),			34	4	24	27	.74	—
Drawing for plumbers (advanced),			17	2	13	14	.79	—
Drawing for plumbers (beginners),			21	1	17	20	.75	—
Mold loft (advanced),			32	6	14	24	.46	—
Mold loft (beginners),			28	6	25	25	.76	—
Monumental design and lettering (advanced),			17	—	15	15	.87	—
Monumental design and lettering (elementary),			19	—	19	18	.83	—
Naval architecture,			16	5	15	15	.87	—
Roof framing and stair building,			15	—	12	13	.77	—
Sheet metal design (advanced),			23	5	14	17	.65	—
Sheet metal design (beginners),			33	7	30	27	.70	—
Total for school,	1	2	318	40	242	267	.75	—

TABLE No. 7. — *Vital statistics, etc.* — Continued.
 Group III. *Evening industrial schools (men)* — Continued.

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.											
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTERING INDUSTRY TRAINED FOR.		Number of withdrawals not entering industry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership X total hours).	
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrawn voluntarily.	Discharged for cause.					
—	—	—	—	—	—	—	—	1	80	1,040	
—	—	—	—	—	—	—	—	1	80	1,520	
—	—	—	—	—	—	—	—	3	80	1,680	
—	—	—	—	—	—	—	—	3	80	2,160	
—	—	—	—	—	—	—	—	1	80	960	
—	—	—	—	—	—	—	—	2	80	960	
—	—	—	—	—	—	—	—	4	80	2,560	
—	—	—	—	—	—	—	—	1	80	2,320	
—	—	—	—	—	—	—	—	4	80	6,000	
—	—	—	—	—	—	—	—	20	720	19,200	
—	—	—	—	—	—	—	—	2	100	1,886	
—	—	—	—	—	—	—	—	1	100	576	
—	—	—	—	—	—	—	—	3	100	3,120	
—	—	—	—	—	—	—	—	1	100	1,194	
—	—	—	—	—	—	—	—	7	400	6,776	
—	—	—	—	—	—	—	—	1	42	2,310	
—	—	—	—	—	—	—	—	1	42	336	
—	—	—	—	—	—	—	—	2	42	294	
—	—	—	—	—	—	—	—	4	126	2,940	
—	—	—	—	—	—	—	—	1	30	420	
—	—	—	—	—	—	—	—	1	40	560	
—	—	—	—	—	—	—	—	1	40	960	
—	—	—	—	—	—	—	—	1	40	1,080	
—	—	—	—	—	—	—	—	1	32	448	
—	—	—	—	—	—	—	—	1	40	800	
—	—	—	—	—	—	—	—	1	40	960	
—	—	—	—	—	—	—	—	1	40	1,000	
—	—	—	—	—	—	—	—	1	40	600	
—	—	—	—	—	—	—	—	1	40	720	
—	—	—	—	—	—	—	—	1	40	600	
—	—	—	—	—	—	—	—	1	40	520	
—	—	—	—	—	—	—	—	1	40	680	
—	—	—	—	—	—	—	—	1	40	1,080	
—	—	—	—	—	—	—	—	8	542	10,428	

TABLE No. 7. — *Vital statistics, etc.* — Continued.
Group III. Evening industrial schools (men) — Concluded.

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Taunton: —	1	1						
Blueprint reading for machinists,			14	-	12	11	.81	-
Modeling and design for silver workers,			10	-	9	9	.89	-
Reading drawings for carpenters,			8	-	6	7	.71	-
Total for school,	1	1	32	-	27	27	.81	-
Westfield: —	1	1						
Blueprint reading,			14	-	8	6.8	.80	-
Lathe operating,			15	-	9	11.5	.85	-
Total for school,	1	1	29	-	17	18.3	.83	-
Worcester: —	1	1						
Cabinet making,			58	1	20	23	.57	-
Drafting,			170	3	63	86	.57	-
Electrical,			158	1	53	100	.58	-
Gasoline engineering,			184	-	50	55	.73	-
House framing,			56	-	23	32	.69	-
Machine shop practice,			162	3	68	78	.64	-
Pattern making,			25	1	8	13	.54	-
Power plant engineering,			95	-	39	28	.96	-
Printing,			17	1	7	11	.72	-
Shop mathematics,			22	1	7	9	.44	-
Tool making,			34	-	14	16	.68	-
Total for school,	1	1	981	11	352	456	.64	-
Total for type of school, . . .	16	23	4,072	186	1,873	2,230.2	.764	49

Group IV. Evening industrial schools (women).

Boston: —	1	1						
Cooking,			18	-	9	10	.80	-
Dressmaking,			39	2	27	29	.79	-
Millinery,			14	3	10	10	.80	-
Power machine operating (cloth),			43	7	21	23	.70	-
Power machine operating (straw),			33	8	20	24	.75	-
Total for school,	1	1	147	20	87	96	.76	-
Total for type of school, . . .	1	1	147	20	87	96	.76	-

TABLE No. 7. — *Vital statistics, etc.* — Continued.
 Group III. *Evening industrial schools (men)* — Concluded.

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.										
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTERING INDUSTRY TRAINED FOR.		Number of withdrawals not entering industry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership X total hours).
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrew voluntarily.	Discharged for cause.				
-	-	-	-	-	-	-	-	1	88	968
-	-	-	-	-	-	-	-	1	88	792
-	-	-	-	-	-	-	-	1	64	448
-	-	-	-	-	-	-	-	3	240	2,208
-	-	-	-	-	-	-	-	1	80	544
-	-	-	-	-	-	-	-	1	80	920.
-	-	-	-	-	-	-	-	2	160	1,464
-	-	-	-	-	-	-	-	2	130	3,640
-	-	-	-	-	-	-	-	4	130	11,180
-	-	-	-	-	-	-	-	2	130	13,000
-	-	-	-	-	-	-	-	2	130	7,150
-	-	-	-	-	-	-	-	1	130	4,160
-	-	-	-	-	-	-	-	5	130	10,140
-	-	-	-	-	-	-	-	1	130	1,690
-	-	-	-	-	-	-	-	2	130	3,640
-	-	-	-	-	-	-	-	1	130	1,430
-	-	-	-	-	-	-	-	1	130	1,170
-	-	-	-	-	-	-	-	1	130	2,080
-	-	-	-	-	-	-	-	22	1,430	59,280
-	-	-	-	-	-	-	-	167	10,834	235,937.1

Group IV. *Evening industrial schools (women).*

-	-	-	-	-	-	-	-	2	132	1,320
-	-	-	-	-	-	-	-	4	132	3,828
-	-	-	-	-	-	-	-	3	132	1,320
-	-	-	-	-	-	-	-	2	132	3,336
-	-	-	-	-	-	-	-	2	132	3,168
-	-	-	-	-	-	-	-	13	660	12,972
-	-	-	-	-	-	-	-	13	660	12,972

TABLE No. 7. — *Vital statistics, etc.* — Continued.*Group V. Homemaking schools (day).*

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Boston,	1	1	129	-	50	10	.90	-
Essex County,	1	1	29	-	23	25	.98	-
Lawrence,	1	1	16	-	15	16	.94	-
Lowell,	1	1	121	22	68	87	.90	24
New Bedford,	1	1	84	3	41	51	.82	1
Newton,	1	1	157	11	113	131.1	.93	3
Northampton,	1	1	75	26	58	64.7	.97	12
Somerville,	1	1	100	10	70	80.9	.903	-
Total for type of school,	8	8	711	72	438	465.7	.918	40

Group VI. Practical arts (evening).

Boston: —	1	15						
Cooking,			110	-	72	66	.82	-
Dressmaking,			562	-	302	274	.73	-
Embroidery,			175	-	141	105	.81	-
Millinery,			398	-	265	264	.66	-
Total for school,	1	15	1,245	-	780	709	.75	-
Cambridge: —	1	1						
Cooking,			47	-	35	17	.59	-
Dressmaking,			17	-	12	12	.75	-
Embroidery,			12	-	10	10	.80	-
Sewing (elementary),			18	-	15	16	.50	-
Sewing (intermediate),			19	-	16	16	.75	-
Total for school,	1	1	113	-	88	71	.66	-
Everett: —	1	1						
Cooking,			38	-	14	16	.88	-
Dressmaking,			39	-	17	18	.89	-
Total for school,	1	1	77	-	31	34	.88	-
Fall River: —	1	1						
Cooking,			73	-	73	67	.89	-
Millinery,			30	-	27	26	.92	-
Sewing,			237	-	212	198	.99	-
Total for school,	1	1	340	-	312	291	.96	-
Holyoke: —	1	1						
Cooking,			82	2	59	60.6	.927	-
Dressmaking,			189	4	88	108.9	.892	-
Embroidery,			16	2	14	13.9	.884	-
Home nursing,			16	-	15	15	.893	-
Millinery,			31	-	25	17.9	.882	-
Total for school,	1	1	334	8	201	216.3	.90	-

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group V. *Homemaking schools (day).*

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.										
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTER- ING INDUSTRY TRAINED FOR.		Number of withdrawals not entering in- dustry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership × total hours).
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrew voluntarily.	Discharged for cause.				
-	-	-	5	1	-	-	-	2	1,500	15,000
-	-	-	-	-	-	-	-	3	1,235	30,875
-	-	-	-	-	-	-	-	1	40	640
18	4	12	25	4	24	-	14	8	1,300	113,100
1	-	-	23	9	11	-	11	7	1,300	66,300
3	-	-	10	3	29	2	19	10	1,333 $\frac{1}{3}$	174,800
10	2	-	10	3	4	-	5	6	1,170	75,699
- ¹	- ¹	- ¹	-	1	29	-	20	10	1,235	99,911
32	6	2	73	21	97	2	69	47	9,113	576,325

Group VI. *Practical arts (evening).*

-	-	-	-	-	-	-	-	4	176	11,616
-	-	-	-	-	-	-	-	15	176	48,224
-	-	-	-	-	-	-	-	6	176	18,480
-	-	-	-	-	-	-	-	13	176	46,464
-	-	-	-	-	-	-	-	38	704	124,784
-	-	-	-	-	-	-	-	1	60	1,020
-	-	-	-	-	-	-	-	1	80	960
-	-	-	-	-	-	-	-	1	30	300
-	-	-	-	-	-	-	-	1	80	1,280
-	-	-	-	-	-	-	-	1	80	1,280
-	-	-	-	-	-	-	-	5	330	4,840
-	-	-	-	-	-	-	-	2	120	1,920
-	-	-	-	-	-	-	-	2	120	2,160
-	-	-	-	-	-	-	-	4	240	4,080
-	-	-	-	-	-	-	-	5	80	5,360
-	-	-	-	-	-	-	-	2	80	2,080
-	-	-	-	-	-	-	-	21	80	15,840
-	-	-	-	-	-	-	-	28	240	23,280
-	-	-	-	-	-	-	-	2	88	5,333
-	-	-	-	-	-	-	-	4	88	9,583.2
-	-	-	-	-	-	-	-	1	40	556
-	-	-	-	-	-	-	-	1	40	600
-	-	-	-	-	-	-	-	1	72	1,288.8
-	-	-	-	-	-	-	-	9	328	17,361

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group VI. *Practical arts (evening)* — Continued.

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Lawrence: —	1	2						
Cooking,			98	—	48	59	.83	—
Dressmaking,			380	6	213	215	.74	—
Millinery,			236	7	133	143	.72	—
Total for school,	1	2	714	13	394	417	.763	—
Lowell: —	1	2						
Cooking,			72	—	60	68	.86	—
Breakfast,			94	5	86	89	.83	—
Luncheon,			94	—	75	86	.84	—
Dinner,								
Millinery,			26	—	26	24	.84	—
Renovating hats,			37	1	21	30	.71	—
Covering frames,			33	—	31	32	.81	—
Straw hats,								
Dressmaking,			170	6	131	150	.86	—
Shirt waists,			35	6	29	33	.83	—
Skirts,			312	6	235	269	.88	—
Dresses,			19	6	16	18	.80	—
Coats,								
Total for school,	1	2	892	30	710	799	.83	—
Methuen: —	1	1						
Cooking,			13	—	13	12.4	.91	13
Dressmaking,			15	—	10	9.79	.93	10
Total for school,	1	1	28	—	23	22.19	.92	23
Natick: —	1	1						
Cooking,			70	1	17	25	.88	—
Dressmaking,			57	2	40	41.5	.89	—
Millinery,			15	—	14	14.3	.92	—
Total for school,	1	1	142	3	71	80.8	.89	—
New Bedford: —	1	5						
Cooking,			90	3	60	60	.88	—
Dressmaking,			605	3	370	390	.83	1
Millinery,			159	2	88	90	.87	6
Total for school,	1	5	854	8	518	540	.86	7
Newton: —	1	1						
Cooking,			38	11	30	27.7	.89	28
Dressmaking,			26	—	20	12.6	.74	7
Sewing (elementary),			38	3	24	28	.78	17
Total for school,	1	1	102	14	74	68.3	.81	52

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group VI. *Practical arts (evening)* — Continued.

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.										
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTERING INDUSTRY TRAINED FOR.		Number of withdrawals not entering industry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership X total hours).
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrawn voluntarily.	Discharged for cause.				
—	—	—	—	—	—	—	—	2	240	14,160
—	—	—	—	—	—	—	—	22	240	51,600
—	—	—	—	—	—	—	—	6	240	34,320
—	—	—	—	—	—	—	—	30	720	100,080
—	—	—	—	—	—	—	—	2	20	1,360
—	—	—	—	—	—	—	—	3	20	1,780
—	—	—	—	—	—	—	—	3	40	3,440
—	—	—	—	—	—	—	—	1	12	288
—	—	—	—	—	—	—	—	1	40	1,200
—	—	—	—	—	—	—	—	1	28	896
—	—	—	—	—	—	—	—	8	20	3,000
—	—	—	—	—	—	—	—	1	20	660
—	—	—	—	—	—	—	—	10	40	10,760
—	—	—	—	—	—	—	—	1	40	720
—	—	—	—	—	—	—	—	15	280	24,104
—	—	—	—	—	—	—	—	1	30	372
—	—	—	—	—	—	—	—	1	60	587
—	—	—	—	—	—	—	—	2	90	959
—	—	—	—	—	—	—	—	1	192	4,800
—	—	—	—	—	—	—	—	1	288	11,952
—	—	—	—	—	—	—	—	1	96	1,372
—	—	—	—	—	—	—	—	3	576	18,124
—	—	—	—	—	—	—	—	4	80	4,800
—	—	—	—	—	—	—	—	17	80	31,200
—	—	—	—	—	—	—	—	5	80	7,200
—	—	—	—	—	—	—	—	26	240	43,200
—	—	—	—	—	—	—	—	2	100	2,770
—	—	—	—	—	—	—	—	1	100	1,260
—	—	—	—	—	—	—	—	2	100	2,800
—	—	—	—	—	—	—	—	5	300	6,830

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group VI. *Practical arts (evening)* — Concluded.

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
North Attleborough: —	1	1						
Cooking,			27	—	— ¹	— ¹	— ¹	— ¹
Dressmaking,			35	3	15	25	.72	—
Total for school,	1	1	62	3	15	25	.72	—
Quincy: —	1	3						
Cooking,			16	—	15	15	.87	—
Dressmaking I. (advanced),			17	—	13	13	.92	—
Dressmaking I. (beginners),			16	—	11	14	.92	—
Dressmaking II. (advanced),			17	—	16	16	.93	—
Dressmaking II. (beginners),			20	2	17	19	.95	—
Total for school,	1	3	86	2	72	77	.91	—
Somerville: —	1	2						
Cooking,			13	—	13	13	.90	—
Dressmaking (advanced),			22	1	22	22	.95	—
Dressmaking (elementary),			17	—	17	17	.88	—
Millinery,			45	—	40	40	.61	—
Total for school,	1	2	97	1	92	92	.78	—
Taunton: —	1	1						
Dressmaking,			25	—	24	24	.96	—
Millinery,			14	—	12	13	.93	—
Total for school,	1	1	39	—	36	37	.95	—
Wakefield: —	1	1						
Cooking,			19	—	14	13.59	.86	—
Dressmaking (sewing),			51	9	39	39.12	.86	—
Millinery,			30	2	26	16.96	.92	—
Total for school,	1	1	100	11	79	68.67	.87	—
Walpole: —	1	1						
Cooking,			8	—	8	7.4	.93	—
Total for school,	1	1	8	—	8	7.4	.93	—
Worcester: ² —	1	2						
Dresses (one-piece),			229	—	137	137	.86	—
Dressmaking (advanced),			40	—	20	21	.81	—
Millinery,			230	—	125	126	.89	—
Sewing (plain),			244	—	30	74	.90	—
Skirts (plain),			142	—	49	52	.90	—
Waists (fancy),			33	—	14	11	.86	—
Waists (plain),			176	—	66	41	.87	—
Total for school,	1	2	1,094	—	441	462	.86	—
Total for type of school,	18	42	6,327	93	3,945	4,017.8	.845	82

¹ No data.

TABLE No. 7. — *Vital statistics, etc.* — Continued.Group VI. *Practical arts (evening)* — Concluded.

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.										
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTER- ING INDUSTRY TRAINED FOR.		Number of withdrawals not entering in- dustry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership × total hours).
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrew voluntarily.	Discharged for cause.				
1	1	1	1	1	1	1	1	1	42	1,050
1	1	1	1	1	1	1	1	1	42	1,050
1	1	1	1	1	1	1	1	1	84	1,050
1	1	1	1	1	1	1	1	1	40	600
1	1	1	1	1	1	1	1	1	40	520
1	1	1	1	1	1	1	1	1	40	560
1	1	1	1	1	1	1	1	1	40	640
1	1	1	1	1	1	1	1	1	40	760
1	1	1	1	1	1	1	1	3	200	3,080
1	1	1	1	1	1	1	1	1	68	884
1	1	1	1	1	1	1	1	2	32	704
1	1	1	1	1	1	1	1	2	36	612
1	1	1	1	1	1	1	1	2	32	1,280
1	1	1	1	1	1	1	1	7	168	3,480
1	1	1	1	1	1	1	1	1	84	2,016
1	1	1	1	1	1	1	1	1	48	624
1	1	1	1	1	1	1	1	2	132	2,640
1	1	1	1	1	1	1	1	1	60	815
1	1	1	1	1	1	1	1	3	60	2,347
1	1	1	1	1	1	1	1	2	60	1,017
1	1	1	1	1	1	1	1	3	180	4,179
1	1	1	1	1	1	1	1	1	50	370
1	1	1	1	1	1	1	1	1	50	370
1	1	1	1	1	1	1	1	6	192	26,304
1	1	1	1	1	1	1	1	2	192	4,032
1	1	1	1	1	1	1	1	5	320	40,320
1	1	1	1	1	1	1	1	7	192	14,208
1	1	1	1	1	1	1	1	3	192	9,984
1	1	1	1	1	1	1	1	1	192	2,112
1	1	1	1	1	1	1	1	2	192	7,872
1	1	1	1	1	1	1	1	26	1,472	105,132
1	1	1	1	1	1	1	1	208	6,334	487,573

² "Membership at close of year" and "withdrawals during the year" in the different departments do not equal the total enrollment for the department, since in some cases pupils are transferred from one department to another during the year, but the totals under the two above-named headings do agree with the total enrollment for the school.

TABLE No. 7. — *Vital statistics, etc.* — Concluded.*Group VII. Continuation schools (compulsory and voluntary).*

COUNTIES, CITIES, TOWNS AND DEPARTMENTS.	Number of schools.	Number of centers.	Total enrollment.	Number of nonresidents.	DISTRIBUTION OF EN- ROLLMENT BY MEMBERSHIP AND ATTENDANCE.			
					Membership at close of year.	Average membership.	Per cent. of attendance.	Number of graduates.
Boston: —	1	9						
Boys'.								
General improvement,			337	—	237	230	.87	—
Prevocational,			1,657	—	907	876	.87	—
Trade extension,			126	—	125	90	.90	—
Trade preparatory,			—	—	—	—	—	—
			2,120	—	1,269	1,196	.87	—
Girls'.								
General improvement,			85	—	85	58	.88	—
Prevocational,			861	—	726	477	.88	—
Trade extension,			324	—	169	289	.88	—
Trade preparatory,			—	—	—	—	—	—
			1,270	—	980	824	.88	—
Total for school,	1	9	3,390	—	2,249	2,020	.87	—
Total for type of school,	1	9	3,390	—	2,249	2,020	.87	—

Group VIII. Agricultural schools.

Bristol County,	1	1	47	6	35	33.9	.94	—
Essex County,	1	1	133	—	97	121	.85	—
Northampton,	1	1	34	21	29	31.3	.96	6
Total for type of school,	3	3	214	27	161	186.2	.917	6

Group IX. Agricultural departments.

Ashfield,	1	1	18	10	16	17	.90	3
Brimfield,	1	1	15	2	11	11.7	.93	1
Clinton,	1	1	16	16	13	13.5	.91	—
Concord,	1	1	37	22	25	31	.953	4
Easton,	1	1	22	—	21	19.9	.973	4
Hadley,	1	1	24	6	21	22.5	.90	3
Harwich,	1	1	18	5	15	15	.87	—
Marlborough,	1	1	18	4	13	15	.97	—
Petersham,	1	1	7	2	6	7	.76	3
Reading,	1	1	33	12	22	28	.98	—
Sutton,	1	1	7	—	6	7	.67	—
Total for type of school,	11	11	215	79	169	187.6	.89	14
Grand total for all types of schools and all departments (State- aided),	74	113	18,322	948	10,852	11,436.1	.86	443
Non-State-aided vocational schools,	—	—	10,660	—	4,678	—	—	—
Total, all schools in the State,	74	113	28,982	948	15,530	11,436.1	.86	443

TABLE No. 7. — *Vital statistics, etc.* — Concluded.Group VII. *Continuation schools (compulsory and voluntary).*

DISTRIBUTION OF GRADUATES AND WITHDRAWALS.											
GRADUATES.			WITHDRAWALS.		WITHDRAWALS NOT ENTER- ING INDUSTRY TRAINED FOR.		Number of withdrawals not entering in- dustry trained for and who had less than six months' trade instruction.	Total number of teachers required.	Total possible hours school is in session per year.	Student hours (average membership × total hours).	
Placed in industry trained for.	Not placed in industry trained for.	Occupations unknown.	Placed in industry trained for.	Sent back to regular school.	Withdrew voluntarily.	Discharged for cause.					
-	-	-	-	-	-	-	-	3	1,500 ²	34,500	
-	-	-	-	-	-	-	-	9	1,500	131,400	
-	-	-	-	-	-	-	-	-	1,500	13,500	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	11	4,500	179,400	
-	-	-	-	-	-	-	-	1	1,500	8,700	
-	-	-	-	-	-	-	-	27	1,500	71,550	
-	-	-	-	-	-	-	-	-	1,500	43,350	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	28	4,500	123,600	
-	-	-	-	-	-	-	-	39	9,000	303,000	
-	-	-	-	-	-	-	-	39	9,000	303,000	

Group VIII. *Agricultural schools.*

-	-	-	4	-	6	1	6	4	1,260	44,065
-	-	-	15	5	9	6	3	11	1,268	165,666
6	-	-	4	-	-	1	1	5	1,035	37,056
6	-	-	23	5	15	8	10	20	3,563	246,787

Group IX. *Agricultural departments.*

2	1	-	2	-	-	-	-	1	1,100	21,416
1	-	-	4	-	-	-	-	1	933	15,588
-	-	-	1	1	1	-	1	1	1,000	15,174
-	-	-	-	-	-	-	-	2	1,000	35,442
-	4	-	-	1	-	-	-	1	1,100	26,361
3	-	-	1	-	1	1	1	1	1,000	24,362
-	-	-	1	2	-	-	-	1	800	13,673
-	-	-	1	1	2	1	3	1	900	15,080
2	1	-	-	-	1	-	-	1	682½	6,118
-	-	-	-	-	4	2	-	1	1,200	24,677
-	-	-	-	1	-	-	-	1	1,000	8,059
8	6	-	10	6	9	4	5	12	10,715½	203,950
377	64	6	270	153	861	125	418	669	148,498	5,625,369
-	-	-	-	-	-	-	-	410	18,834	-
277	64	6	270	153	861	125	418	1,079	167,332	5,625,369

² One hundred and fifty hours is all the time one pupil can possibly attend.

VIII. COUNTY TRAINING SCHOOLS.

The following table gives a list of the county training schools in the State for the commitment of habitual truants, absentees and school offenders.

COUNTY TRAINING SCHOOLS.	Location.	Superintendents.
Essex,	Lawrence,	W. Grant Fancher.
Hampden,	Springfield,	Charles E. Butler.
Middlesex, ¹	North Chelmsford,	Rufus E. Corlew.
Norfolk, Bristol and Plymouth,	Walpole,	James H. Craig.
Worcester,	Oakdale,	Stephen P. Streeter.

¹ Under the law commitments from Chelsea, Revere and Winthrop in Suffolk County must be to the training school for the county of Middlesex.

The counties of Barnstable, Berkshire, Dukes, Franklin, Hampshire and Nantucket are exempted by law from maintaining training schools of their own, but the county commissioners of each of these counties are required to assign an established training school as a place of commitment for habitual truants, absentees and school offenders. The places designated by the several commissioners are as follows:—

COUNTY.	Location of assigned training school.	COUNTY.	Location of assigned training school.
Barnstable,	Walpole.	Franklin,	North Chelmsford.
Berkshire,	Springfield.	Hampshire,	North Chelmsford.
Dukes,	Walpole.	Nantucket,	- -

Table showing the number of pupils attending, admitted and discharged.

COUNTY TRAINING SCHOOLS.	Number at beginning of year.	Number admitted during the year.	Number discharged during the year.	Number at close of the year.	During year ending —
Essex,	129	41	49	121	Dec. 31, 1915
Hampden,	43	28	39	32	Nov. 30, 1915
Middlesex,	97	59	56	100	Dec. 31, 1914
Norfolk, Bristol and Plymouth,	48	20	20	48	Oct. 31, 1915
Worcester,	64	31	25	70	Oct. 31, 1915
Totals,	381	179	189	371	-

IX. MASSACHUSETTS SCHOOL FUND.

The following statement shows the condition of the Massachusetts school fund:—

Amount of the fund Jan. 1, 1915,	\$5,000,000 00
Amount of fund Dec. 31, 1915,	5,000,000 00
Income for 1915,	202,848 94
Paid to towns in the distribution of Jan. 25, 1916,	202,848 94

The following table shows the amount of the principal of the Massachusetts school fund and the annual income from 1902 to 1915:—

YEAR.	Principal.	Income.
1902,	\$4,570,548 14	\$220,731 77
1903,	4,670,548 14	197,379 93
1904,	4,780,110 66	214,224 13
1905,	4,880,110 66	219,379 32
1906,	4,980,110 66	224,468 31
1907,	5,000,000 00	228,621 22
1908,	5,000,000 00	229,439 73
1909,	5,000,000 00	231,173 87
1910,	5,000,000 00	238,748 72
1911,	5,000,000 00	227,664 36
1912,	5,000,000 00	228,558 32
1913,	5,000,000 00	228,758 79
1914,	5,000,000 00	204,879 26
1915,	5,000,000 00	202,848 94

X. FINANCIAL STATEMENT OF THE BOARD OF EDUCATION,
DEC. 1, 1914, TO NOV. 30, 1915.

SALARIES OF COMMISSIONER, DEPUTIES, AGENTS AND ASSISTANTS, AND
FOR CLERICAL AND MESSENGER SERVICE.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$48,480 00
<i>Expenditures.</i>		
Commissioner :—		
David Snedden,	\$6,500 00	
Deputy commissioners:—		
William Orr,	4,500 00	
Robert O. Small,	4,000 00	
Agents and assistants:—		
Edward C. Baldwin,	2,500 00	
Mary H. Brown,	470 00	
Walter I. Hamilton,	2,600 00	
James F. Hopkins,	1,500 00	
Clarence D. Kingsley,	2,600 00	
Chester L. Pepper,	2,500 00	
Rufus W. Stimson,	3,500 00	
Francis G. Wadsworth,	2,500 00	
Nellie M. Wilkins,	1,000 00	
Clerks, stenographers, etc. :—		
Astrid E. Ahl,	869 17	
May J. Barker,	723 04	
James D. Beane, from September 16,	71 85	
Mary E. Biggane, to July 7,	397 42	
A. C. Blake,	1,447 58	
Miriam P. Clark, to January 23,	164 90	
Gertrude M. Cloney, to July 7,	535 91	
Mabel R. Cooke, from September 27,	133 85	
Esther E. Elwell,	1,150 00	
Elizabeth G. Fernands, from March 29,	506 94	
Elizabeth R. Flinn, from September 1,	150 00	
Sarah A. Holt,	894 76	
Ellen E. Joyce, from July 7,	200 27	
Helen V. Mahan,	220 00	
George W. MacKeen, to September 11,	281 00	
Anna M. Murray,	1,000 00	
Mary E. Reynolds,	817 50	
Irene G. Stiles,	860 83	
George H. Varney,	1,300 00	
Extra clerical and stenographic service,	1,860 85	
	\$47,755 87	
Unexpended balance,	724 13	
		\$48,480 00

TRAVELING EXPENSES OF COMMISSIONER, DEPUTIES, AGENTS AND
ASSISTANTS.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915), .	\$5,000 00	
Refunds,	4 86	
		\$5,004 86
<i>Expenditures.</i>		
Edward C. Baldwin,	\$799 99	
Mary H. Brown,	60 05	
Walter I. Hamilton,	209 91	
Clarence D. Kingsley,	372 06	
William Orr,	289 94	
Chester L. Pepper,	279 89	
Robert O. Small,	399 79	
David Snedden,	222 38	
Rufus W. Stimson,	1,317 68	
Francis G. Wadsworth,	477 63	
Nellie M. Wilkins,	458 16	
Others,	111 73	
	\$4,999 21	
Unexpended balance,	5 65	
		¹ \$5,004 86

INCIDENTAL EXPENSES.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915), .	\$6,000 00	
Refunds,	4 65	
		\$6,004 65
<i>Expenditures.</i>		
Advertising,	\$57 60	
Books, periodicals and clippings,	562 03	
Camera supplies,	51 03	
Changing partition,	40 00	
Expressage,	42 53	
Lantern slides,	122 79	
Postage,	1,751 21	
Printing,	1,413 66	
Stationery and office supplies,	379 09	
Typewriters and accessories,	47 98	
Telephone service, tolls and telegrams, .	949 40	
Traveling expenses of members of board, .	147 61	
Water and ice,	40 80	
Repairs to stereoptican, gas tank, etc., .	54 35	
Repairs to adding machine,	29 10	
Sundries,	155 54	
	\$5,844 72	
Unexpended balance,	159 93	
		\$6,004 65

¹ See deficiency statement, page 335.

ANNUAL REPORTS AND BULLETINS.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$4,500 00
<i>Expenditures.</i>		
4,550 copies seventy-eighth annual report,	\$3,582 49	
700 copies list of superintendents of schools,	18 06	
1,000 copies the reorganization of elementary education for older children,	13 30	
1,000 copies discussion of entrance requirements to colleges and normal schools,	11 30	
1,000 copies proposed minimum course of study and proposed teachers' manual,	12 30	
1,000 copies State-aided vocational agricultural education in 1914,	32 65	
1,000 copies certification of teachers,	8 10	
1,000 copies training classes for teachers in vocational schools,	27 70	
1,000 copies State-aided vocational education,	55 45	
1,000 copies approximate distribution of State school fund,	95 43	
1,000 copies continuation schools, etc.,	44 35	
1,000 copies union superintendencies in Massachusetts,	32 84	
1,500 copies laws relating to medical inspection,	11 70	
3,000 copies laws relating to State-aided vocational education,	47 70	
5,000 copies educational legislation, 1915,	74 00	
5,000 copies course of study for first six grades of public schools,	299 82	
1,500 copies News Bulletin No. 1,	47 08	
1,500 copies News Bulletin No. 2,	54 69	
1,400 copies News Bulletin No. 3,	30 80	
	\$4,499 76	
Unexpended balance,	24	\$4,500 00

RENT OF OFFICES.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),	\$4,485 00	
Transferred from appropriation for extraordinary expenses,	542 16	
		\$5,027 16
<i>Expenditures.</i>		
Rent of offices in Ford Building,	\$5,027 16	
		\$5,027 16

UNIVERSITY EXTENSION.

<i>Receipts.</i>		
Appropriation (chapter 294, Acts of 1915),		\$25,000 00
<i>Expenditures.</i>		
Salaries of director, agents, assistants, clerks, stenographers, etc.: —		
James A. Moyer, director from October 18,	\$577 94	
Joseph W. L. Hale, agent from November 8,	159 68	
Robert H. Spahr, agent from November 30,	6 11	
Helen V. Mahan,	93 75	
Anna E. Day,	51 11	
Agnes T. Doyle,	23 32	
Margaret V. Gallivan,	52 50	
Leon Gainsboro,	25 14	
Thomas Hawley (rewriting assignments and making drawings),	244 00	
E. F. Van Amburgh (making drawings),	135 90	
Wm. J. Mann (making investigation of even- ing school conditions),	16 34	
Others,	9 00	
	\$1,394 79	
Travel: —		
David Snedden,	\$205 42	
Ralph S. Jordan,	65 65	
Charles H. Tuck,	40 34	
Edwin A. Start,	215 22	
James A. Moyer,	132 27	
Joseph W. L. Hale,	27 67	
	\$686 57	
Incidentals: —		
Printing,	\$11 22	
Postage,	10 00	
Office supplies,	155 61	
Stencil paper,	133 20	
Rent of offices,	56 25	
Stationery,	116 84	
Books, maps, etc.,	2,443 19	
Typewriting machines,	572 26	
Duplicating machines,	245 65	
Mimescope,	40 00	
Adding machine,	245 00	
Stereopticon,	85 26	
Lantern slides,	52 60	
Drafting supplies,	54 33	
1,500 book covers,	165 00	
Expressage,	6 13	
<i>Amount carried forward,</i>	\$4,392 54	

UNIVERSITY EXTENSION — *Concluded.*

<i>Amount brought forward,</i>	\$4,392 54	
Incidentals — <i>Con.</i>		
Telephone and telegraph,	97 18	
Cameras and supplies,	65 67	
Sundries,	35 95	
	\$4,591 34	
Total expenditures,	\$6,672 70	
Unexpended balance,	18,327 30	\$25,000 00

TRAINING VOCATIONAL TEACHERS.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$5,000 00
<i>Expenditures.</i>		
Charles R. Allen:—		
Salary (eleven months),	\$3,208 35	
Expenses,	459 77	
Anna M. Murray,	150 00	
Anna E. Day,	582 08	
Printing,	95 70	
Advertising,	14 85	
Services and expenses of local directors,	410 60	
Office supplies,	25 93	
Photographs,	23 50	
Sundries,	27 39	
	\$4,998 17	
Unexpended balance,	1 83	¹ \$5,000 00

SIGHT AND HEARING TEST MATERIAL.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$800 00
<i>Expenditures.</i>		
2,000 Snellen test cards,	\$31 80	
2,000 envelopes,	15 46	
5,000 directions for testing,	30 40	
10,000 report of sight and hearing test,	16 70	
15,000 record of sight and hearing test,	103 85	
<i>Amount carried forward,</i>	\$198 21	

¹ See deficiency statement, page 335.

SIGHT AND HEARING TEST MATERIAL—*Concluded.*

<i>Amount brought forward,</i>	\$198 21	
100,500 record cards, (5 x 3),	49 80	
128,300 slips, eye and ear,	113 20	
73,700 slips, physical defects,	66 30	
113,700 slips, dental,	108 10	
5,000 booklets, medical inspection,	105 34	
	\$640 95	
Unexpended balance,	159 05	\$800 00

SCHOOL REGISTERS AND OTHER BLANKS.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$2,000 00
<i>Expenditures.</i>		
1,100 copies school return blank,	\$48 60	
22,300 copies school register,	757 37	
750,000 school census slips,	244 50	
260,000 school census cards,	549 21	
500 package labels,	3 00	
Labor shipping material to school authorities,	100 00	
Expressage,	86 32	
	\$1,789 00	
Unexpended balance,	211 00	\$2,000 00

TEACHERS' INSTITUTES AND CONFERENCES OF SUPERINTENDENTS OF SCHOOLS AND SCHOOL COMMITTEES.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$500 00
<i>Expenditures.</i>		
Expenses of superintendents of schools attending conferences on proposed course of study, held in Boston on May 15 and September 11,	\$48 35	
Expenses of superintendents of schools attending conferences of school committee members at the following places: Salem, Framingham, Harwich, Vineyard Haven, Bridgewater, Fitchburg, Ipswich, Greenfield, Blackstone,	116 03	
<i>Amount carried forward,</i>	\$164 38	

TEACHERS' INSTITUTES AND CONFERENCES OF SUPERINTENDENTS OF
SCHOOLS AND SCHOOL COMMITTEES—*Concluded.*

<i>Amount brought forward,</i>	\$164 38	
Services and expenses of instructors at teachers' institute held at Northborough, September 27,	55 57	
Services of instructor at institute of vocational agricultural instructors, held at Amherst, July 30,	10 00	
	\$229 95	
Unexpended balance,	270 05	\$500 00

COUNTY TEACHERS' ASSOCIATIONS.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),	\$750 00	
Transferred from 1914 appropriation,	50 00	\$800 00
<i>Expenditures.</i>		
Barnstable County Teachers' Association,	\$50 00	
Berkshire County Teachers' Association,	50 00	
Bristol County Teachers' Association,	100 00	
Essex County Teachers' Association,	50 00	
Franklin County Teachers' Association,	50 00	
Hampden County Teachers' Association,	50 00	
Hampshire County Teachers' Association,	50 00	
Middlesex County Teachers' Association,	50 00	
Norfolk County Teachers' Association,	50 00	
Northwest Middlesex County Teachers' Association,	50 00	
Plymouth County Teachers' Association,	50 00	
Worcester County Teachers' Association,	50 00	
	\$650 00	
Unexpended balance,	150 00	\$800 00

MASSACHUSETTS TEACHERS' ASSOCIATION.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$300 00
<i>Expenditures.</i>		
Paid to the treasurer of the Massachusetts Teachers' Association,	\$300 00	\$300 00

SUPERINTENDENCY UNIONS.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$81,000 00
<i>Expenditures.</i>		
Paid to the following-named unions:—		
Acton, Carlisle, Littleton, Westford,	\$1,250 00	
Acushnet, Fairhaven, Mattapoissett,	416 66	
Agawam, Ludlow,	500 00	
Alford, Egremont, Richmond, West Stock- bridge,	1,250 00	
Amherst, Pelham,	250 00	
Ashburnham, Winchendon,	416 67	
Ashby, Lunenburg, Townsend,	1,250 00	
Ashfield, Cummington, Goshen, Plainfield,	1,250 00	
Ashland, Hopkinton,	1,250 00	
Auburn, Sutton,	1,250 00	
Avon, Holbrook, Randolph,	1,250 00	
Ayer, Boylston, Shirley, West Boylston,	1,250 00	
Barre, Hardwick, Petersham,	1,250 00	
Becket, Chester, Middlefield,	1,250 00	
Bedford, Belmont, Burlington,	625 00	
Belchertown, Enfield,	1,250 00	
Bellingham, Hopedale, Mendon,	833 34	
Berkley, Dighton, Rehoboth,	1,250 00	
Berlin, Northborough, Southborough, Shrews- bury,	1,250 00	
Bernardston, Hadley, Hatfield,	1,250 00	
Billerica, Stoneham,	500 00	
Blackstone, Seekonk,	1,250 00	
Blandford, Huntington, Montgomery, Russell, Bolton, Dunstable, Harvard, Pepperell,	1,250 00	
Bourne, Mashpee, Sandwich,	687 50	
Boxborough, Maynard, Stow,	500 00	
Boxford, Georgetown, Groveland, Rowley,	1,250 00	
Brewster, Dennis, Yarmouth,	1,250 00	
Brimfield, Monson,	1,250 00	
Brookfield, North Brookfield,	1,250 00	
Buckland, Colrain, Shelburne,	1,250 00	
Carver, Lakeville, Raynham, Rochester,	1,250 00	
Charlemont, Hawley, Heath, Rowe,	1,250 00	
Charlton, Leicester,	1,250 00	
Chatham, Eastham, Harwich, Orleans,	1,034 48	
Cheshire, Hancock, Lanesborough, New Ash- ford,	1,250 00	
Chesterfield, Williamsburg, Worthington,	1,250 00	
Chilmark, Edgartown, Gay Head, Oak Bluffs, Tisbury, West Tisbury,	1,250 00	
Clarksburg, Florida, Monroe, Savoy,	1,250 00	
Conway, Deerfield, Sunderland, Whately,	1,250 00	
<i>Amount carried forward,</i>	\$43,263 65	

SUPERINTENDENCY UNIONS — *Concluded.*

<i>Amount brought forward,</i>	\$43,263 65	
<i>Paid to the following-named unions—Con.</i>		
Dana, Greenwich, New Salem, Prescott,	1,250 00	
Douglas, Upton,	500 00	
Dover, Sudbury, Wayland,	1,000 00	
Dracut, North Reading, Tewksbury, Tyngs- borough, Wilmington,	1,250 00	
Dudley, Webster,	416 67	
Duxbury, Marshfield, Scituate,	416 66	
East Bridgewater, West Bridgewater,	1,250 00	
Easthampton, Southampton, Westhampton,	500 00	
East Longmeadow, Hampden, Longmeadow, Wilbraham,	1,250 00	
Erving, Leverett, Shutesbury, Wendell,	1,250 00	
Essex, Lynnfield, Middleton, Topsfield, Wen- ham,	1,062 50	
Foxborough, Norton, Plainville,	1,250 00	
Franklin, Wrentham,	375 00	
Freetown, Westport,	1,250 00	
Gill, Leyden, Northfield, Warwick,	1,250 00	
Grafton, Upton,	1,250 00	
Granby, South Hadley,	1,250 00	
Granville, Sandisfield, Southwick, Tolland,	1,250 00	
Halifax, Kingston, Pembroke, Plympton,	1,250 00	
Hanover, Hanson, Norwell,	1,250 00	
Hinsdale, Peru, Washington, Windsor,	1,250 00	
Holland, Wales, Warren,	1,250 00	
Holden, Oakham, Paxton, Rutland,	1,250 00	
Holliston, Medway, Sherborn,	1,250 00	
Hubbardston, Phillipston, Royalston, Tem- pleton,	1,250 00	
Lee, Otis, Monterey, Tyngham,	875 00	
Medfield, Millis, Norfolk, Westwood,	937 50	
Merrimac, Newbury, Salisbury, West New- bury,	1,250 00	
Millbury, Oxford,	1,250 00	
Mount Washington, New Marlborough, Shef- field,	1,250 00	
New Braintree, Sturbridge, West Brookfield,	1,250 00	
Princeton, Sterling, Westminster,	1,250 00	
Provincetown, Truro, Wellfleet,	1,250 00	
Somerset, Swansea,	1,250 00	
	\$80,596 98	
Unexpended balance,	403 02	
		\$81,000 00

INSTRUCTION OF THE ADULT BLIND AT THEIR HOMES.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$5,000 00
<i>Expenditures.</i>		
Paid for services and expenses of instructors, their clerks, guides, etc.,	\$5,000 00	
		¹ \$5,000 00

EDUCATION OF DEAF CHILDREN.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$128,000 00
<i>Expenditures.</i>		
American School for the Deaf, Hartford, Conn.:—		
Board and tuition of 46 pupils for the quarter ending Feb. 28, 1915,	\$3,162 50	
Board and tuition of 51 pupils for the quarter ending May 31, 1915,	3,506 25	
Board and tuition of 53 pupils for the quarter ending Aug. 31, 1915,	3,889 72	
Board and tuition of 48 pupils for the quarter ending Nov. 30, 1915,	3,300 00	
Clothing, books, etc., furnished pupils from July 1, 1914, to July 1, 1915,	399 29	
City of Boston, school committee:—		
Tuition of 120 pupils from Dec. 1, 1914, to Jan. 31, 1915,	3,900 00	
Tuition of 131 pupils from Feb. 1, 1915, to July 1, 1915,	11,013 75	
Tuition of 121 pupils from Sept. 8, 1915, to Oct. 28, 1915,	3,381 00	
Traveling expenses of pupils from Nov. 2, 1914, to Nov. 1, 1915,	3,026 50	
Boston School for the Deaf, Randolph:—		
Board and tuition of 151 pupils for the half year ending Jan. 31, 1915,	20,322 49	
Board and tuition of 152 pupils for the half year ending June 16, 1915,	20,350 00	
Clarke School for the Deaf, Northampton:—		
Board and tuition of 123 pupils for the quarter ending March 31, 1915,	12,364 50	
Board and tuition of 123 pupils for the quarter ending June 30, 1915,	12,068 75	
<i>Amount carried forward,</i>	\$100,684 75	

¹ See deficiency statement, page 335.

EDUCATION OF DEAF CHILDREN — *Concluded.*

Amount brought forward,	\$100,684 75	
Clarke School for the Deaf, Northampton — <i>Con.</i>		
Board and tuition of 123 pupils for the quarter ending Sept. 30, 1915,	12,125 00	
Board and tuition of 125 pupils for the quarter ending Dec. 31, 1915,	12,268 75	
Perkins Institution and Massachusetts School for the Blind:—		
Board and tuition of deaf-blind pupils for school year ending June 30, 1915,	700 00	
Sarah Fuller Home, West Medford:—		
Board and tuition of 8 pupils for the quarter ending Jan. 1, 1915,	479 84	
Board and tuition of 10 pupils for quarter ending April 1, 1915,	553 98	
Board and tuition of 9 pupils for quarter ending July 1, 1915,	562 50	
Board and tuition of 8 pupils for quarter ending Oct. 1, 1915,	399 66	
Traveling expenses of Harold and Marion Johnson,	9 86	
	<hr/>	
	\$127,784 34	
Balance unexpended,	215 66	
	<hr/>	
		¹ \$128,000 00

HIGH SCHOOL TUITION.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$79,610 00
<i>Expenditures.</i>		
Reimbursement to towns, as per detail on pages 249-258,	\$55,531 25	
\$500 grant to high schools, as per detail on page 243,	23,000 00	
Transportation of children living on islands,	957 60	
	<hr/>	
	\$79,488 85	
Unexpended balance,	121 15	
	<hr/>	
		¹ \$79,610 00

¹ See deficiency statement, page 335.

HIGH SCHOOL TRANSPORTATION.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$24,000 00
<i>Expenditures.</i>		
Reimbursement to towns, as per detail on pages 249-258,	\$23,937 31	
Unexpended balance,	62 69	
		¹ \$24,000 00

AID TO PUPILS IN NORMAL SCHOOLS.

<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$4,000 00
<i>Expenditures.</i>		
State Normal School at Bridgewater (60 pupils),	\$808 34	
State Normal School at Fitchburg (76 pupils),	1,008 68	
State Normal School at Framingham (40 pupils),	556 50	
State Normal School at Hyannis (11 pupils),	141 89	
State Normal School at Lowell (3 pupils),	39 51	
State Normal School at North Adams (8 pupils),	106 82	
State Normal School at Salem (57 pupils),	799 65	
State Normal School at Westfield (30 pupils),	399 48	
State Normal School at Worcester (10 pupils),	139 13	
		\$4,000 00

COMPILATION OF LAWS RELATING TO PUBLIC EDUCATION AND PRINTING OF SAME.

<i>Receipts.</i>		
Appropriation (chapter 46, Resolves of 1914),	\$500 00	
Appropriation (chapter 369, Acts of 1915),	450 00	
		\$950 00
<i>Expenditures.</i>		
10,000 copies "Revised Laws relating to Public Instruction,"	\$816 47	
Unexpended balance,	133 53	
		\$950 00

STATEMENT OF DEFICIENCIES OCCURRING IN CERTAIN APPROPRIATIONS.

Appropriation for traveling expenses,	\$145 54	
Appropriation for high school tuition, etc.,	6,501 30	
Appropriation for high school transportation,	7,254 21	
Appropriation for training vocational teachers,	113 21	
Appropriation for education of deaf pupils,	2,053 09	
Appropriation for instruction of adult blind at their homes,	990 08	
		\$17,057 43

¹ See deficiency statement, page 335.

RECEIPTS REVERTING TO STATE TREASURY.

Registration of teachers,	\$1,498 00	
Rent of property located on land purchased by the Commonwealth for site for Normal Art School,	877 52	
Miscellaneous receipts,	64 51	
		\$2,440 03

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS).

STATE NORMAL SCHOOL AT BRIDGEWATER.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$68,986 00
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$29,692 43	
Training school,	7,506 00	
General administration,	11,572 57	
Repairs and improvements,	2,318 37	
	\$51,089 37	
Furnishings: —		
Bedsteads and mattresses,	\$48 42	
Furniture and upholstery,	967 92	
Household furnishings,	419 09	
	\$1,435 43	
Heat, light and power: —		
Coal,	\$4,561 86	
Freight on coal,	398 50	
Electricity,	677 17	
Gas,	28 70	
Oil,	94 10	
Sundries,	1 54	
	\$5,761 87	
Repairs and improvements: —		
Brick, cement, lime and plaster,	\$327 41	
Electrical work and supplies,	271 11	
Hardware,	323 38	
Lumber,	142 88	
Machinery, etc.,	1,249 09	
	\$2,313 87	
Amount carried forward,		\$2,313 87

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Amount brought forward,	\$2,313 87	
Repairs and improvements — <i>Con.</i>		
Paints, oils, glass, etc.,	237 83	
Plumbing, steam and gas fitting and supplies,	590 44	
	\$3,142 14	
Grounds: —		
Fertilizers, vines, seeds, etc.,	\$103 86	
Wagons, tools, etc.,	372 66	
Sundries,	8 75	
	\$485 27	
Supplies, normal school: —		
Apparatus,	\$380 99	
Books, periodicals and binding,	1,417 21	
Diplomas,	139 03	
Manual training,	1,378 13	
Material for laboratory use,	138 74	
Stationery, printed forms and outlines,	179 63	
	\$3,633 73	
Supplies, training school: —		
Apparatus,	\$21 20	
Books,	362 93	
Manual training,	135 41	
Stationery and materials,	296 70	
	\$816 24	
Supplies, office and other: —		
Postage,	\$194 00	
Printing,	272 55	
Soap and disinfectants,	335 79	
Stationery, etc.,	209 95	
	\$1,012 29	
Miscellaneous: —		
Freight, expressage and transportation,	\$281 40	
Medical examinations,	110 00	
Music and entertainments,	70 00	
Telephone and telegraph,	69 18	
Travel (officials),	278 49	
Water,	312 92	
Sundries,	28 00	
	\$1,149 99	
Total expenditure,	\$68,526 33	
Unexpended balance,	459 67	
		\$68,986 00

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$575 00	
Sales: —		
Repairs and improvements,	6 60	
Supplies, normal school,	745 75	
Supplies, training school,	25 20	
Miscellaneous,	10 00	
Miscellaneous: —		
Interest on bank balances,	69 93	
Sundries,	15 54	
		\$1,448 02
BOARDING HALL FUND.		
<i>Receipts.</i>		
Balance, Dec. 1, 1914,	\$7,301 63	
Regular boarders,	45,508 31	
Transient boarders, sales, etc.,	2,380 71	
		\$55,190 65
<i>Expenditures.</i>		
Salaries, wages and labor,	\$12,748 50	
Food: —		
Butter,	\$4,273 84	
Butterine,	351 54	
Beans,	124 94	
Bread and crackers,	712 80	
Cereals, rice, meal, etc.,	370 72	
Cheese,	143 69	
Eggs,	1,263 91	
Flour,	860 71	
Fish,	919 96	
Fruit (dried and fresh),	2,168 00	
Meats,	8,192 56	
Milk,	3,361 96	
Molasses and syrup,	63 76	
Spices, seasonings, salt, etc.,	689 25	
Sugar,	954 85	
Tea, coffee, broma and cocoa,	567 36	
Vegetables,	1,838 40	
Yeast,	180 49	
Sundries,	206 31	
	\$27,245 05	
Supplies: —		
Bedding, table linen, etc.,	\$948 03	
Brushes, brooms, etc.,	280 64	
Crockery, glassware, cutlery, etc.,	743 64	
Other kitchen furnishings,	1,530 72	
	\$3,503 03	
<i>Amount carried forward,</i>		

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$3,503 03	
Supplies — <i>Con.</i>		
Soap and laundry supplies,	741 28	
Water, when metered,	772 08	
Wooden ware, buckets, pails, etc.,	3 84	
Sundries,	1,290 21	
	\$6,310 44	
Total expenditure,	\$46,303 99	
Balance unexpended,	8,886 66	\$55,190 65
STATE NORMAL SCHOOL AT FITCHBURG.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915), . .	\$52,874 00	
City of Fitchburg,	16,536 00	\$69,410 00
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$20,699 92	
Training school,	23,547 01	
General administration,	6,732 22	
	\$50,979 15	
Furnishings: —		
Carpets, rugs, etc.,	\$12 77	
Furniture and upholstery,	407 15	
Household furnishings,	17 50	
Pictures and statuary,	89 08	
	\$526 50	
Heat, light and power: —		
Coal,	\$4,340 43	
Electricity,	1,078 63	
Gas,	187 46	
Oil,	14 85	
Sundries,	2 00	
	\$5,623 37	
Repairs and improvements: —		
Brick, cement, lime and plaster,	\$420 30	
Electrical work and supplies,	106 08	
Hardware,	102 27	
<i>Amount carried forward,</i>	\$628 65	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$628 65
Repairs and improvements — <i>Con.</i>	
Lumber,	642 54
Machinery, etc.,	81 30
Paints, oils, glass, etc.,	411 99
Plumbing, steam and gas fitting supplies,	271 04
Roofing and materials,	1 29
Labor (men on repairs),	2,898 54
Sundries,	16 09
	\$4,951 44
Grounds: —	
Fertilizers, vines, seeds, etc.,	\$257 30
Wagons, tools, etc.,	101 75
Labor,	442 51
Putting in stone steps,	182 50
Sundries,	58 83
	\$1,047 89
Supplies, normal school: —	
Apparatus,	\$148 09
Books, periodicals and binding,	1,016 35
Diplomas,	99 20
Manual training,	487 14
Material for laboratory use,	58 42
Stationery, printed forms and outlines,	647 20
Sundries,	36 71
	\$2,493 11
Supplies, training school: —	
Apparatus,	\$189 84
Books,	114 43
Manual training,	484 62
Stationery and materials,	569 28
	\$1,358 17
Supplies, office and other: —	
Postage,	\$401 45
Printing,	26 55
Soap and disinfectants,	160 91
Stationery, etc.,	286 47
	\$875 38
Miscellaneous: —	
Freight, expressage and transportation,	\$167 92
Medical examinations,	2 00
Music and entertainments,	314 35
Telephone and telegraph,	450 73
<i>Amount carried forward,</i>	\$935 00

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$935 00	
Miscellaneous — <i>Con.</i>		
Travel (officials),	494 23	
Sundries,	4 18	
	\$1,433 41	
Total expenditure,	\$69,288 42	
Unexpended balance,	121 58	\$69,410 00
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$725 00	
Sales,	303 49	
Miscellaneous: —		
Interest on bank balances,	67 90	
Sundries,	10 92	\$1,107 31
BOARDING HALL FUND.		
<i>Receipts.</i>		
Balance Dec. 1, 1914,	\$2,051 69	
Regular boarders,	18,064 35	
Transient boarders, sales, etc.,	2,810 12	\$22,926 16
<i>Expenditures.</i>	\$4,838 97	
Salaries, wages and labor,		
Food: —	\$1,434 95	
Butter,	56 55	
Butterine,	96 81	
Beans,	356 29	
Bread and crackers,	156 91	
Cereals, rice, meal, etc.,	39 16	
Cheese,	470 92	
Eggs,	188 45	
Flour,	510 56	
Fish,	1,188 01	
Fruit (dried and fresh),	3,830 96	
Meats,	1,702 87	
Milk,	36 29	
Molasses and syrup,	215 78	
Spices, seasoning, salt, etc.,	314 27	
Sugar,	163 77	
Tea, coffee, broma and cocoa,	685 29	
Vegetables,	46 20	
Yeast,	162 17	
Sundries,		
	\$11,656 21	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Supplies: —		
Bedding, table linen, etc.,	\$1 20	
Brushes, brooms, etc.,	23 75	
Crockery, glassware, cutlery, etc.,	264 69	
Other kitchen furnishings,	82 01	
Soap and laundry supplies,	105 29	
Water, when metered,	181 69	
Wooden ware, buckets, pails, etc.,	24 80	
Laundry work,	1,703 31	
Coal, telephone, medicines, etc.,	573 30	
Towel bars, glass shelves, etc.,	94 40	
Sundries,	175 86	
	\$3,230 30	
Total expenditure,	\$19,725 48	
Unexpended balance,	3,200 68	\$22,926 16
STATE NORMAL SCHOOL AT FRAMINGHAM.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),	\$56,655 00	
Balance for 1914 appropriation,	122 63	\$56,777 63
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$27,612 50	
Training school,	7,050 00	
General administration,	7,529 67	
	\$42,192 17	
Furnishings: —		
Carpets, rugs, etc.,	\$11 75	
Furniture and upholstery,	404 29	
Household furnishings,	178 61	
Pictures and statuary,	61 43	
Sundries,	11 31	
	\$667 39	
Heat, light and power: —		
Coal,	\$4,973 84	
Wood,	8 00	
<i>Amount carried forward,</i>	\$4,981 84	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$4,981 84
Heat, light and power — <i>Con.</i>	
Electricity,	63 71
Gas,	618 94
Oil,	128 67
	\$5,793 16
Repairs and improvements: —	
Brick, cement, lime and plaster,	\$130 11
Electrical work and supplies,	270 94
Hardware,	240 33
Lumber,	195 04
Machinery, etc.,	98 00
Paints, oil, glass, etc.,	540 22
Plumbing, steam and gas fitting and supplies,	642 30
Roofing and materials,	55 79
Sundries,	3 00
	\$2,175 73
Grounds: —	
Fertilizers, vines, seeds, etc.,	\$121 76
Wagons, tools, etc.,	246 61
Labor,	588 03
Sundries,	22 38
	\$978 78
Supplies, normal school: —	
Apparatus,	\$673 08
Books, periodicals and binding,	594 51
Diplomas,	97 80
Household arts,	610 09
Manual training,	396 50
Material for laboratory use,	213 21
Stationery, printed forms and outlines,	191 89
Sundries,	21 35
	\$2,798 43
Supplies, training school: —	
Apparatus,	\$15 72
Books,	37 66
Manual training,	3 50
Stationery and materials,	10 62
	\$67 50
Supplies, office and other: —	
Ice,	\$138 00
Postage,	237 62
<i>Amount carried forward,</i>	\$375 62

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$375 62	
Supplies, office and other — <i>Con.</i>		
Printing,	367 94	
Soap and disinfectants,	154 79	
Stationery, etc.,	108 87	
Sundries,	3 60	
	\$1,090 52	
Miscellaneous: —		
Freight, expressage and transportation,	\$224 84	
Music and entertainment,	37 50	
Telephone and telegraph,	99 42	
Travel (official),	197 67	
Water,	531 09	
	\$1,090 52	
Total expenditure,	\$56,774 50	
Unexpended balance,	3 13	
		\$56,777 63
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$50 00	
Fees and other charges,	170 22	
Sales: —		
Heat, light and power,	2 00	
Supplies, normal school,	273 98	
Miscellaneous: —		
Interest on bank balances,	106 47	
Rent,	80 00	
Sundries,	25 76	
		\$708 43
BOARDING HALL FUND.		
<i>Receipts.</i>		
Balance Dec. 1, 1914,	\$7,389 70	
Regular boarders,	26,364 20	
Transient boarders, sales, etc.,	488 97	
		\$34,242 87
<i>Expenditures.</i>		
Salaries, wages and labor,	\$6,285 78	
Food: —		
Butter,	\$2,130 34	
Beans,	130 69	
Bread and crackers,	164 65	
Cereals, rice, meal, etc.,	231 77	
Cheese,	114 40	
Eggs,	682 05	
<i>Amount carried forward,</i>	\$3,453 90	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$3,453 90	
Food — <i>Con.</i>		
Flour,	518 01	
Fish,	607 55	
Fruit (dried and fresh),	1,025 11	
Meats,	4,165 07	
Milk,	2,185 44	
Molasses and syrup,	52 58	
Spices, seasonings, salt, etc.,	150 81	
Sugar,	242 50	
Tea, coffee, broma and cocoa,	214 95	
Vegetables,	1,061 11	
Yeast,	8 61	
Express,	197 62	
Sundries,	122 45	
	\$14,005 71	
Supplies: —		
Bedding, table linen, etc.,	\$15 18	
Brushes, brooms, etc.,	16 53	
Crockery, glassware, cutlery, etc.,	591 52	
Other kitchen furnishings,	90 31	
Soap and laundry supplies,	134 12	
Telephone,	146 24	
Laundry,	3,189 48	
Rent of cottage on account of fire,	855 82	
Sundries,	28 07	
	\$4,211 45	
Total expenditures,	\$25,358 76	
Balance,	8,884 11	\$34,242 87
STATE NORMAL SCHOOL AT HYANNIS.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),	\$27,380 00	
Balance from 1914 appropriation,	29	
Deficiency appropriation,	231 94	
		\$27,612 23
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$14,721 37	
Training school,	2,565 95	
General administration,	3,035 18	
Repairs and improvements,	438 10	
	\$20,760 60	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Furnishings: —	
Bedsteads and mattresses,	\$56 60
Carpets, rugs, etc.,	86 03
Furniture and upholstery,	50 38
Household furnishings,	56 33
Sundries,	30 46
	\$279 80
Heat, light and power: —	
Coal,	\$1,553 52
Freight on coal,	156 96
Electricity,	226 94
Oil,	8 50
	\$1,945 92
Repairs and improvements: —	
Brick, cement, lime and plaster,	\$233 95
Electrical work and supplies,	281 69
Hardware,	68 91
Lumber,	652 49
Paints, oils, glass, etc.,	570 39
Plumbing, steam and gas fitting and supplies,	423 83
Roofing and materials,	23 22
Sundries,	17 50
	\$2,271 98
Grounds: —	
Fertilizers, vines, seeds, etc.,	\$28 03
Sundries,	153 73
	\$181 76
Supplies, normal school: —	
Apparatus,	\$77 81
Books, periodicals and binding,	419 10
Diplomas,	28 04
Manual training,	84 83
Material for laboratory use,	126 18
Stationery, printed forms and outlines,	104 19
Sundries,	4 54
	\$844 69
Supplies, training school: —	
Apparatus,	\$24 46
Books,	125 55
Manual training,	10 42
Stationery and materials,	9 92
	\$170 35

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Supplies, office and other: —		
Postage,	\$79 00	
Printing,	137 33	
Soap and disinfectants,	8 00	
Stationery, etc.,	63 43	
Sundries,	57 11	
	\$344 87	
Miscellaneous: —		
Freight, expressage and transportation,	\$203 77	
Music and entertainments,	63 47	
Telephone and telegraph,	52 15	
Travel (officials),	225 78	
Water,	200 28	
Sundries,	61 32	
	\$806 77	
Total expenditures,	\$27,606 74	
Unexpended balance,	5 49	
		\$27,612 23
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$298 00	
Sales: —		
Supplies, normal school,	67 52	
Miscellaneous: —		
Rent,	200 00	
Sundries,	4 47	
		\$569 99
BOARDING HALL FUND.		
<i>Receipts.</i>		
Balance Dec. 1, 1914,	\$3,965 57	
Regular boarders,	13,062 68	
Transient boarders, sales, etc.,	455 15	
		\$17,483 40
<i>Expenditures.</i>		
Salaries, wages and labor,	\$3,885 72	
Food: —		
Butter,	\$1,098 67	
Beans,	68 83	
Bread and crackers,	96 58	
Cereals, rice, meal, etc.,	102 22	
Cheese,	38 73	
Eggs,	111 83	
Amount carried forward,	\$1,516 86	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$1,516 86	
Food — <i>Con.</i>		
Flour,	259 55	
Fish,	460 17	
Fruit (dried and fresh),	716 56	
Meats,	2,905 15	
Milk,	927 38	
Molasses and syrup,	23 20	
Spices, seasonings, salt, etc.,	179 25	
Sugar,	269 78	
Tea, coffee, broma and cocoa,	127 23	
Vegetables,	476 96	
Yeast,	16 02	
Sundries,	325 71	
	\$8,203 82	
Supplies: —		
Bedding, table linen, etc.,	\$78 27	
Brushes, brooms, etc.,	5 25	
Crockery, glassware, cutlery, etc.,	91 85	
Other kitchen furnishings,	61 60	
Soap and laundry supplies,	164 29	
Water, when metered,	191 06	
Sundries,	390 51	
	\$982 83	
Total expenditures,	\$13,072 37	
Balance,	4,411 03	\$17,483 40
STATE NORMAL SCHOOL AT LOWELL.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),	\$35,586 00	
City of Lowell,	28,353 65	\$63,939 65
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$17,930 48	
Training school,	24,963 25	
General administration,	7,790 74	
	\$50,684 47	
Furnishings: —		
Carpets, rugs, etc.,	\$44 11	
Furniture and upholstery,	724 77	
<i>Amount carried forward,</i>	\$768 88	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$768 88
Furnishings — <i>Con.</i>	
Household furnishings,	85 10
Pictures and statuary,	52 00
	\$905 98
Heat, light and power: —	
Coal,	\$2,051 89
Wood,	23 50
Electricity,	522 18
Gas,	74 80
	\$2,672 37
Repairs and improvements: —	
Brick, cement, lime and plaster,	\$23 14
Electrical work and supplies,	67 93
Hardware,	39 91
Lumber,	37 64
Machinery, etc.,	4 79
Paints, oils, glass, etc.,	110 55
Plumbing, steam and gas fitting and supplies,	365 89
	\$649 85
Grounds: —	
Fertilizers, vines, seeds, etc.,	\$263 75
Wagons, tools, etc.,	81 08
	\$344 83
Supplies, normal school: —	
Apparatus,	\$371 07
Books, periodicals and binding,	740 94
Diplomas,	107 05
Manual training,	100 77
Material for laboratory use,	41 57
Stationery, printed forms and outlines,	560 30
	\$1,921 70
Supplies, training school: —	
Apparatus,	\$232 12
Books,	1,004 77
Manual training,	661 31
Stationery and materials,	518 94
	\$2,417 14
Supplies, office and other: —	
Ice,	\$14 17
Postage,	54 00
Printing,	128 27
<i>Amount carried forward,</i>	\$196 44

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$196 44	
Supplies, office and other — <i>Con.</i>		
Soap and disinfectants,	208 61	
Stationery, etc.,	170 51	
	\$575 56	
Miscellaneous: —		
Freight, expressage and transportation,	\$121 15	
Music and entertainments,	386 48	
Telephone and telegraph,	224 66	
Travel (officials),	208 43	
Water,	279 81	
Sundries,	19 20	
	\$1,239 73	
Total expenditures,	\$61,411 63	
Unexpended balance,	2,528 02	\$63,939 65
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$350 00	
Sales: —		
Repairs and improvements,	6 25	
Sundries,	6 94	\$363 19
STATE NORMAL SCHOOL AT SALEM.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),	\$49,912 00	
City of Salem,	13,625 08	\$63,537 08
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$27,581 90	
Training school,	12,309 41	
General administration,	6,310 16	
Repairs and improvements,	18 00	
	\$46,219 47	
Furnishings: —		
Carpets, rugs, etc.,	\$92 54	
Furniture and upholstery,	481 40	
Household furnishings,	123 86	
Pictures and statuary,	10 00	
	\$707 80	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Heat, light and power: —		
Coal,	\$1,481	27
Electricity,	937	97
Gas,	122	00
Oil,	59	49
Removing ashes,	56	75
	\$2,657	48
Repairs and improvements: —		
Brick, cement, lime and plaster,	\$303	49
Electrical work and supplies,	710	61
Hardware,	911	21
Lumber,	420	15
Machinery, etc.,	209	88
Paints, oils, glass, etc.,	364	55
Plumbing, steam and gas fitting and supplies,	659	66
Roofing and materials,	65	77
	\$3,645	32
Grounds: —		
Fertilizers, vines, seeds, etc.,	\$305	88
Wagons, tools, etc.,	23	67
	\$329	55
Supplies, normal school: —		
Apparatus,	\$614	44
Books, periodicals and binding,	1,401	88
Diplomas,	146	52
Manual training,	60	33
Material for laboratory use,	78	90
Stationery, printed forms and outlines,	784	84
	\$3,086	91
Supplies, training school: —		
Apparatus,	\$296	86
Books,	627	99
Manual training,	506	27
Stationery and materials,	434	42
Street car tickets,	273	15
	\$2,138	69
Supplies, office and other: —		
Ice,	\$45	79
Postage,	191	72
Printing,	254	65
Soap and disinfectants,	655	64
Stationery, etc.,	98	52
Photographs and plans,	12	50
	\$1,258	82

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Miscellaneous: —		
Freight, expressage and transportation,	\$107 01	
Medical examinations,	132 00	
Music and entertainments,	310 00	
Telephone and telegraph,	213 14	
Travel (officials),	332 92	
Water,	173 07	
Advertising,	13 00	
	\$1,281 14	
Total expenditures,	\$61,325 18	
Unexpended balance,	2,211 90	\$63,537 08
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$475 00	
Sales: —		
Furnishings,	8 00	
Supplies, normal school,	1 65	
Miscellaneous: —		
Interest on bank balances,	25 04	
Sundries,	14 15	\$523 84
STATE NORMAL SCHOOL AT WESTFIELD.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),	\$39,454 00	
Balance from 1914 appropriation,	194 90	\$39,648 90
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$14,105 79	
Training school,	6,977 47	
General administration,	5,395 56	
	\$26,478 82	
Furnishings: —		
Bedsteads and mattresses,	\$10 05	
Carpets, rugs, etc.,	18 50	
Furniture and upholstery,	910 72	
Household furnishings,	25 43	
Pictures and statuary,	20 73	
	\$985 43	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Heat, light and power: —	
Coal,	\$3,197 99
Wood,	13 00
Electricity,	634 75
Gas,	128 10
Oil,	12
	\$3,973 96
Repairs and improvements: —	
Brick, cement, lime and plaster,	\$68 36
Electrical work and supplies,	93 62
Hardware,	256 08
Lumber,	666 46
Machinery, etc.,	75 94
Paints, oils, glass, etc.,	524 73
Plumbing, steam and gas fitting and supplies,	553 43
Roofing and materials,	47 27
	\$2,285 89
Grounds: —	
Fertilizers, vines, seeds, etc.,	\$217 35
Wagons, tools, etc.,	230 24
Sundries,	88 95
	\$536 54
Supplies, normal school: —	
Apparatus,	\$330 14
Books, periodicals and binding,	1,182 89
Diplomas,	71 20
Manual training,	291 09
Material for laboratory use,	79 33
Stationery, printed forms and outlines,	563 46
	\$2,518 11
Supplies, training school: —	
Apparatus,	\$137 20
Books,	114 25
Manual training,	13 31
Sundries,	6 76
	\$271 52
Supplies, office and other: —	
Postage,	\$237 13
Printing,	133 02
Soap and disinfectants,	60 20
Stationery, etc.,	69 64
	\$499 99

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Miscellaneous: —		
Freight, expressage and transportation,	\$120 03	
Music and entertainments,	186 89	
Telephone and telegraph,	128 25	
Travel (officials),	495 95	
Water,	99 00	
Sundries,	3 86	
	\$1,033 98	
Total expenditures,	\$38,584 24	
Unexpended balance,	1,064 66	\$39,648 90
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$250 00	
Sales: —		
Supplies, normal school,	203 83	
Miscellaneous: —		
Sundries,	8 40	\$462 23
BOARDING HALL FUND.		
<i>Receipts.</i>		
Balance Dec. 1, 1914,	\$5,940 27	
Regular boarders,	15,155 29	
Transient boarders, sales, etc.,	367 94	\$21,463 50
<i>Expenditures.</i>		
Salaries, wages and labor,	\$3,432 45	
Food: —		
Butter,	\$942 70	
Butterine,	177 44	
Beans,	43 43	
Bread and crackers,	51 86	
Cereals, rice, meal, etc.,	158 42	
Cheese,	45 23	
Eggs,	385 45	
Flour,	249 74	
Fish,	363 05	
Fruit (dried and fresh),	1,001 46	
Meats,	2,971 04	
Milk,	1,070 22	
Molasses and syrup,	37 56	
Spices, seasonings, salt, etc.,	217 56	
Sugar,	395 55	
Tea, coffee, broma and cocoa,	218 69	
Vegetables,	713 79	
Yeast,	7 13	
Sundries,	52 83	
	\$9,103 15	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Supplies: —		
Bedding, table linen, etc.,	\$222 39	
Brushes, brooms, etc.,	23 44	
Crockery, glassware, cutlery, etc.,	213 13	
Soap and laundry supplies,	142 01	
Water, when metered,	302 69	
Wooden ware, buckets, pails, etc.,	17 30	
Sundries,	600 45	
	\$1,521 41	
Total expenditures,	\$14,057 01	
Unexpended balance,	7,406 49	\$21,463 50
STATE NORMAL SCHOOL AT WORCESTER.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$39,610 00
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$21,576 85	
Training school,	1,947 50	
General administration,	4,961 81	
	\$28,486 16	
Furnishings: —		
Carpets, rugs, etc.,	\$10 80	
Furniture and upholstery,	961 42	
Household furnishings,	75 02	
Sundries,	3 50	
	\$1,050 74	
Heat, light and power: —		
Coal,	\$1,396 31	
Electricity,	303 18	
Gas,	56 90	
	\$1,756 39	
Repairs and improvements: —		
Brick, cement, lime and plaster,	\$181 07	
Electrical work and supplies,	310 92	
Hardware,	55 05	
Lumber,	1,398 95	
Machinery, etc.,	15 29	
Paints, oils, glass, etc.,	374 85	
Amount carried forward,	\$2,336 13	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Amount brought forward,	\$2,336 13	
Repairs and improvements — <i>Con.</i>		
Plumbing, steam and gas fitting and supplies,	59 33	
Roofing and materials,	83 64	
Sundries,	7 03	
	\$2,486 13	
Grounds: —		
Fertilizers, vines, seeds, etc.,	\$358 80	
Wagons, tools, etc.,	23 70	
Sundries,	1 10	
	\$383 60	
Supplies, normal school: —		
Apparatus,	\$637 55	
Books, periodicals and binding,	1,939 43	
Diplomas,	57 36	
Material for laboratory use,	6 45	
Stationery, printed forms and outlines,	62 51	
Sundries,	1 35	
	\$2,704 65	
Supplies, training school: —		
Apparatus,	\$88 61	
Books,	37 83	
Stationery and materials,	10 07	
	\$136 51	
Supplies, office and other: —		
Postage,	\$127 50	
Printing,	264 70	
Soap and disinfectants,	353 27	
Stationery, etc.,	221 81	
Sundries,	1 00	
	\$968 28	
Miscellaneous: —		
Freight, expressage and transportation,	\$235 26	
Medical examinations,	100 35	
Music and entertainments,	511 67	
Telephone and telegraph,	142 95	
Travel (officials),	267 19	
Water,	186 79	
Sundries,	179 00	
	\$1,623 21	
Total expenditures,	\$39,595 67	
Unexpended balance,	14 33	
		\$39,610 00

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$200 00	
Sales: —		
Grounds,	1 00	
Supplies, normal school,	11 00	
Supplies, office and other,	8 31	
Miscellaneous,	80	
Miscellaneous: —		
Interest on bank balances,	27 13	
Rent,	250 00	
Sundries,	6 12	
		\$504 36
BOARDING HALL FUND.		
<i>Receipts.</i>		
Balance Dec. 1, 1914,	\$1,136 64	
Regular boarders,	2,748 41	
Transient boarders, sales, etc.,	915 64	
		\$4,800 69
STATE NORMAL SCHOOL AT NORTH ADAMS.		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915), . .	\$42,301 00	
Balance from 1914,	11	
Transferred from "small items" appropria- tion,	6 30	
		\$42,307 41
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$13,100 00	
Training school,	8,899 17	
General administration,	5,911 83	
	\$27,911 00	
Furnishings: —		
Bedsteads and mattresses,	\$61 05	
Carpets, rugs, etc.,	1,157 72	
Sundries,	1 50	
	\$1,220 27	
Heat, light and power: —		
Coal,	\$3,721 73	
Electricity,	665 57	
Gas,	44 42	
Oil,	6 09	
	\$4,437 81	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Repairs and improvements: —	
Brick, cement, lime and plaster,	\$440 01
Electrical work and supplies,	185 71
Hardware,	60 42
Lumber,	621 91
Machinery, etc.,	187 14
Paints, oils, glass, etc.,	723 28
Plumbing, steam and gas fitting and supplies,	928 57
Roofing and materials,	3 25
Sundries,	49 67
	\$3,199 96
Grounds: —	
Fertilizers, vines, seeds, etc.,	\$232 53
Wagons, tools, etc.,	25 64
Sundries,	348 15
	\$606 32
Supplies, normal school: —	
Apparatus,	\$412 79
Books, periodicals and binding,	829 62
Diplomas,	47 72
Manual training,	341 44
Material for laboratory use,	206 21
Stationery, printed forms and outlines,	441 05
Sundries,	4 41
	\$2,283 24
Supplies, training school: —	
Apparatus,	\$467 61
Books,	101 53
Manual training,	309 85
Stationery and materials,	53 40
	\$932 39
Supplies, office and other: —	
Postage,	\$184 91
Soap and disinfectants,	154 13
Stationery, etc.,	136 99
	\$476 01
Miscellaneous: —	
Freight, expressage and transportation,	\$309 34
Medical examinations,	50 00
Music and entertainments,	82 36
Telephone and telegraph,	160 46
Travel (officials),	444 06
<i>Amount carried forward,</i>	\$1,046 22

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

Amount brought forward,	\$1,046 22	
Miscellaneous — <i>Con.</i>		
Water,	17 82	
Sundries,	67 44	
	\$1,131 48	
Total expenditure,	\$42,198 50	
Unexpended balance,	108 91	\$42,307 41
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$600 00	
Sales: —		
Supplies, normal school,	3 54	
Miscellaneous: —		
Rent,	250 00	
Sundries,	85 25	\$938 79
BOARDING HALL FUND.		
<i>Receipts.</i>		
Balance Dec. 1, 1914,	\$412 14	
Regular boarders,	14,042 39	
Transient boarders, sales, etc.,	1,182 98	\$15,637 51
<i>Expenditures.</i>		
Salaries, wages and labor,	\$4,318 84	
Food: —		
Butter,	\$1,037 25	
Butterine,	2 13	
Beans,	30 40	
Bread and crackers,	118 41	
Cereals, rice, meal, etc.,	163 73	
Cheese,	56 50	
Eggs,	462 92	
Flour,	223 22	
Fish,	242 93	
Fruit (dried and fresh),	385 00	
Meats,	3,123 08	
Milk,	877 10	
Molasses and syrup,	33 73	
Spices, seasonings, salt, etc.,	94 61	
Sugar,	216 52	
Tea, coffee, broma and cocoa,	209 53	
Amount carried forward,	\$7,279 06	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Continued.*

<i>Amount brought forward,</i>	\$7,279 06	
Food — <i>Con.</i>		
Vegetables,	567 14	
Yeast,	39 34	
Sundries,	267 63	
	\$8,151 17	
Supplies: —		
Bedding, table linen, etc.,	\$62 44	
Brushes, brooms, etc.,	3 41	
Crockery, glassware, cutlery, etc.,	109 82	
Other kitchen furnishings,	19 86	
Soap and laundry supplies,	124 36	
Water,	384 00	
Sundries,	226 67	
	\$930 56	
Total expenditure,	\$13,400 57	
Unexpended balance,	2,236 94	\$15,637 51
STATE NORMAL ART SCHOOL (BOSTON).		
MAINTENANCE.		
<i>Receipts.</i>		
Appropriation (chapter 179, Acts of 1915),		\$51,552 46
<i>Expenditures.</i>		
Salaries, wages and labor: —		
Normal school,	\$34,963 08	
Evening school,	1,200 00	
General administration,	8,499 53	
	\$44,662 61	
Furnishings: —		
Furniture and upholstery,	\$293 60	
Household furnishings,	18 76	
Pictures and statuary,	266 67	
	\$579 03	
Heat, light and power: —		
Coal,	\$665 89	
Electricity,	1,081 39	
Gas,	32 72	
Oil,	10	
	\$1,780 10	

APPROPRIATIONS, RECEIPTS AND EXPENDITURES OF STATE NORMAL
SCHOOLS (INCLUDING BOARDING HALLS) — *Concluded.*

Repairs and improvements: —		
Brick, cement, lime and plaster,	\$78 69	
Electrical work and supplies,	270 72	
Hardware,	55 60	
Machinery, etc.,	7 00	
Paints, oils, glass, etc.,	63 77	
Plumbing, steam and gas fitting and supplies,	138 15	
	\$613 93	
Supplies, normal school: —		
Apparatus,	\$953 84	
Books, periodicals and binding,	366 86	
Diplomas,	67 45	
Manual training,	594 69	
Material for laboratory use,	222 74	
Stationery, printed forms and outlines,	23 52	
Sundries,	3 00	
	\$2,232 10	
Supplies, office and other: —		
Postage,	\$129 08	
Printing,	371 81	
Soap and disinfectants,	133 16	
Stationery, etc.,	137 68	
Sundries,	9 38	
	\$781 11	
Miscellaneous: —		
Freight, expressage and transportation,	\$161 83	
Medical examinations,	200 00	
Music and entertainments,	3 70	
Telephone and telegraph,	148 33	
Travel (officials),	163 57	
Water,	119 60	
Sundries,	101 41	
	\$898 44	
Total expenditure,	\$51,547 32	
Unexpended balance,	5 14	
		\$51,552 46
RECEIPTS REVERTING TO STATE TREASURY.		
Charges to pupils: —		
Tuition,	\$650 00	
Sales: —		
Miscellaneous,	17 00	
Miscellaneous: —		
Interest on bank balances,	14 38	
		\$681 38



PART IV.

AN ABSTRACT

OF THE

SCHOOL RETURNS MADE BY THE SCHOOL COMMITTEES
OF THE SEVERAL TOWNS AND CITIES IN
THE COMMONWEALTH

FOR

THE SCHOOL YEAR 1914-15.

EXPLANATION.

The Abstract of School Returns includes statistics for school enrollment, membership, attendance, teaching force and for expenditures for the following items, for the school year, July 1, 1914, to June 30, 1915:—

General control:— School committee and business offices. Superintendents' salaries and business offices.	Maintenance of school plant:— Repairs, replacement and upkeep.
Instruction:— Principals' salaries and expenses. Supervisors' salaries and expenses. Teachers' salaries. Text-books. Stationery, supplies and miscellaneous.	Auxiliary agencies:— Libraries. Promotion of health. Transportation. Miscellaneous (tuition, etc.). Total for support.
Operation of school plant:— Janitors' service. Fuel. Miscellaneous expenses.	Outlay:— New grounds, buildings, alterations. New equipment. Total for outlay.

In addition to the above data there is given a statement of the cost for support of the public schools through local taxation and from other sources, including State aid, for the fiscal year of each city and town in the Commonwealth.

The abstract also includes a statement of the rate for the State and the rate and rank for each city and town of—

1. The total tax per thousand dollars of valuation.
2. The valuation per pupil in the average membership of the public schools.
3. Cost of support of public schools from all sources per pupil in the average membership of the schools.
4. Cost of support from local taxation for each pupil in the average membership of the public schools.
5. Cost of support from local taxation for each thousand dollars of valuation.

There is also given the cost of support of high schools and the cost of instruction in high schools per pupil in the average membership.

An alphabetical list of cities and towns is given on pages iii-vii. The number placed before each name corresponds to the rank of the city or town in the abstract. By the use of this index the statistics of any particular city or town can easily be found.

INDEX LIST OF CITIES AND TOWNS.

94 Abington.	294 Boxford.
174 Acton.	296 Boylston.
206 Acushnet.	68 Braintree.
43 Adams.	302 Brewster.
128 Agawam.	72 Bridgewater.
342 Alford.	281 Brimfield.
55 Amesbury.	12 Brockton.
101 Amherst.	167 Brookfield.
74 Andover.	36 Brookline.
52 Arlington.	214 Buckland.
177 Ashburnham.	304 Burlington.
277 Ashby.	
271 Ashfield.	5 Cambridge.
209 Ashland.	109 Canton.
65 Athol.	309 Carlisle.
31 Attleboro.	210 Carver.
157 Auburn.	267 Charlemont.
183 Avon.	182 Charlton.
145 Ayer.	215 Chatham.
	103 Chelmsford.
112 Barnstable.	21 Chelsea.
139 Barre.	217 Cheshire.
272 Becket.	230 Chester.
240 Bedford.	311 Chesterfield.
181 Belchertown.	24 Chicopee.
205 Bellingham.	339 Chilmark.
92 Belmont.	243 Clarksburg.
268 Berkley.	41 Clinton.
276 Berlin.	150 Cohasset.
291 Bernardston.	201 Colrain.
29 Beverly.	81 Concord.
146 Billerica.	241 Conway.
90 Blackstone.	301 Cummington.
295 Blandford.	
288 Bolton.	126 Dalton.
1 Boston.	292 Dana.
153 Bourne.	58 Danvers.
338 Boxborough.	114 Dartmouth.

60 Dedham.	170 Groton.
165 Deerfield.	162 Groveland.
192 Dennis.	
163 Dighton.	185 Hadley.
171 Douglas.	310 Halifax.
285 Dover.	197 Hamilton.
130 Dracut.	299 Hampden.
117 Dudley.	318 Hancock.
327 Dunstable.	160 Hanover.
207 Duxbury.	194 Hanson.
	127 Hardwick.
131 East Bridgewater.	263 Harvard.
312 Eastham.	176 Harwich.
66 Easthampton.	186 Hatfield.
216 East Longmeadow.	14 Haverhill.
99 Easton.	324 Hawley.
245 Edgartown.	335 Heath.
303 Egremont.	104 Hingham.
279 Enfield.	254 Hinsdale.
249 Erving.	143 Holbrook.
213 Essex.	172 Holden.
19 Everett.	351 Holland.
	147 Holliston.
100 Fairhaven.	11 Holyoke.
3 Fall River.	169 Hopedale.
134 Falmouth.	155 Hopkinton.
17 Fitchburg.	260 Hubbardston.
330 Florida.	79 Hudson.
122 Foxborough.	179 Hull.
44 Framingham.	220 Huntington.
91 Franklin.	
222 Freetown.	87 Ipswich.
40 Gardner.	156 Kingston.
349 Gay Head.	
188 Georgetown.	250 Lakeville.
274 Gill.	154 Lancaster.
25 Gloucester.	273 Lanesborough.
340 Goshen.	9 Lawrence.
350 Gosnold.	120 Lee.
88 Grafton.	133 Leicester.
289 Granby.	137 Lenox.
287 Granville.	37 Leominster.
85 Great Barrington.	293 Leverett.
53 Greenfield.	106 Lexington.
321 Greenwich.	333 Leyden.

SCHOOL RETURNS.

v

247 Lincoln.	319 New Braintree.
242 Littleton.	219 Newbury.
257 Longmeadow.	34 Newburyport.
4 Lowell.	252 New Marlborough.
105 Ludlow.	300 New Salem.
228 Lunenburg.	16 Newton.
7 Lynn.	270 Norfolk.
275 Lynnfield.	27 North Adams.
	28 Northampton.
13 Malden.	93 North Andover.
149 Manchester.	57 North Attleborough.
98 Mansfield.	204 Northborough.
73 Marblehead.	62 Northbridge.
223 Marion.	136 North Brookfield.
35 Marlborough.	212 Northfield.
202 Marshfield.	261 North Reading.
343 Mashpee.	151 Norton.
239 Mattapoisett.	226 Norwell.
82 Maynard.	70 Norwood.
129 Medfield.	
26 Medford.	258 Oak Bluffs.
148 Medway.	308 Oakham.
32 Melrose.	97 Orange.
278 Mendon.	259 Orleans.
168 Merrimac.	315 Otis.
50 Methuen.	132 Oxford.
67 Middleborough.	
334 Middlefield.	64 Palmer.
251 Middleton.	326 Paxton.
42 Milford.	39 Peabody.
111 Millbury.	317 Pelham.
227 Millis.	234 Pembroke.
71 Milton.	140 Pepperell.
345 Monroe.	346 Peru.
110 Monson.	290 Petersham.
78 Montague.	323 Phillipston.
331 Monterey.	22 Pittsfield.
347 Montgomery.	328 Plainfield.
352 Mount Washington.	229 Plainville.
	48 Plymouth.
246 Nahant.	307 Plympton.
138 Nantucket.	337 Prescott.
56 Natick.	284 Princeton.
102 Needham.	115 Provincetown.
353 New Ashford.	
6 New Bedford.	20 Quincy.

116 Randolph.	262 Sunderland.
203 Raynham.	135 Sutton.
86 Reading.	84 Swampscott.
184 Rehoboth.	187 Swansea.
30 Revere.	
298 Richmond.	18 Taunton.
256 Rochester.	123 Templeton.
77 Rockland.	124 Tewksbury.
118 Rockport.	244 Tisbury.
320 Rowe.	348 Tolland.
231 Rowley.	248 Topsfield.
286 Royalston.	196 Townsend.
269 Russell.	297 Truro.
199 Rutland.	283 Tyngsborough.
	332 Tyringham.
15 Salem.	
211 Salisbury.	180 Upton.
306 Sandisfield.	113 Uxbridge.
208 Sandwich.	
69 Saugus.	51 Wakefield.
313 Savoy.	336 Wales.
152 Scituate.	108 Walpole.
158 Seekonk.	23 Waltham.
161 Sharon.	63 Ware.
195 Sheffield.	121 Wareham.
218 Shelburne.	119 Warren.
224 Sherborn.	316 Warwick.
173 Shirley.	341 Washington.
190 Shrewsbury.	46 Watertown.
344 Shutesbury.	166 Wayland.
144 Somerset.	49 Webster.
10 Somerville.	96 Wellesley.
280 Southampton.	264 Wellfleet.
198 Southborough.	314 Wendell.
47 Southbridge.	266 Wenham.
107 South Hadley.	95 Westborough.
265 Southwick.	237 West Boylston.
80 Spencer.	164 West Bridgewater.
8 Springfield.	235 West Brookfield.
232 Sterling.	38 Westfield.
191 Stockbridge.	142 Westford.
76 Stoneham.	325 Westhampton.
83 Stoughton.	233 Westminster.
255 Stow.	221 West Newbury.
189 Sturbridge.	178 Weston.
253 Sudbury.	141 Westport.

SCHOOL RETURNS.

vii

61 West Springfield.	89 Winchendon.
236 West Stockbridge.	59 Winchester.
322 West Tisbury.	329 Windsor.
238 Westwood.	54 Winthrop.
45 Weymouth.	33 Woburn.
282 Whately.	2 Worcester.
75 Whitman.	305 Worthington.
159 Wilbraham.	200 Wrentham.
175 Williamsburg.	
125 Williamstown.	225 Yarmouth.
193 Wilmington.	

GROUP I. CITIES. — 1914-15.

	CITIES.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
1	Boston, . . .	686,092	\$1,541,222,900	\$14,246	28	\$17 50	214
2	Worcester, . . .	145,986	172,334,979	7,261	97	19 60	133
3	Fall River, . . .	119,295	102,242,718	6,707	114	23 20	21
4	Lowell, . . .	106,294	89,294,001	7,452	90	21 90	60
5	Cambridge, . . .	104,839	127,891,395	8,248	73	21 40	71
6	New Bedford, . . .	96,652	108,032,232	8,199	76	23 20	22
7	Lynn, . . .	89,336	90,305,830	6,986	105	20 00	117
8	Springfield, . . .	88,926	180,129,051	10,830	41	16 50	248
9	Lawrence, . . .	85,892	79,813,490	8,167	78	18 00	197
10	Somerville, . . .	77,236	74,946,894	5,872	146	21 10	79
11	Holyoke, . . .	57,730	63,445,439	9,110	57	18 80	164
12	Brockton, . . .	56,878	52,718,962	5,214	182	22 70	34
13	Malden, . . .	44,404	42,389,420	5,785	151	20 90	90
14	Haverhill, . . .	44,115	42,296,553	6,052	137	18 60	171
15	Salem, . . .	43,697	39,632,600	7,656	88	20 00	124
16	Newton, . . .	39,806	83,607,920	11,845	35	18 80	165
17	Fitchburg, . . .	37,826	37,583,417	7,960	81	21 00	82
18	Taunton, . . .	34,259	26,274,534	5,508	168	21 20	75
19	Everett, . . .	33,484	31,837,050	4,554	225	23 30	20
20	Quincy, . . .	32,642	40,952,340	6,313	131	22 20	47
21	Chelsea, . . .	32,452	29,205,810	4,351	242	24 00	14
22	Pittsfield, . . .	32,121	40,269,800	6,206	133	19 80	129
23	Waltham, . . .	27,834	31,300,100	10,113	48	18 00	203
24	Chicopee, . . .	25,401	18,816,960	5,020	194	18 70	167
25	Gloucester, . . .	24,398	25,917,913	5,801	150	22 00	50
26	Medford, . . .	23,150	29,709,650	5,740	153	20 40	110
27	North Adams, . . .	22,019	16,532,077	5,395	175	19 10	149
28	Northampton, . . .	19,431	18,040,082	6,591	117	17 80	208
29	Beverly, . . .	18,650	44,637,135	10,532	43	15 50	273
30	Revere, . . .	18,219	21,721,456	4,528	228	23 60	16
31	Attleboro, . . .	16,215	21,206,468	7,945	82	19 20	146
32	Melrose, . . .	15,715	18,567,330	6,811	111	21 70	63
33	Woburn, . . .	15,308	12,334,037	4,362	240	26 00	4
34	Newburyport, . . .	14,949	12,824,727	6,357	125	20 00	120
35	Marlborough, . . .	14,579	11,006,156	5,652	159	22 20	45
	Totals, . . .	2,345,830	\$3,379,041,426	\$9,303	-	-	-

ERRATUM.

For number of illiterates sixteen to twenty-one years, substitute the following figures: —

Boston, 69; total, 12,356.

SCHOOL RETURNS.

ix

GROUP I. CITIES. — 1914-15.

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION FROM LAST PRECEDING CITY FISCAL YEAR.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily attendance.
\$3 60	306	25,612	85,668	22,824	9,669	119,452	18,298,217	99,829
5 73	176	5,281	17,808	3,747	59	26,450	4,137,394	22,125
5 94	160	4,605	16,592	3,517	1,883	17,035	2,626,445	14,197
4 69	249	3,141	11,434	1,976	839	13,423	1,971,137	11,105
4 79	242	3,567	11,758	2,677	275	16,649	2,700,916	14,554
4 35	273	3,890	12,797	3,371	1,759	16,256	2,323,637	12,431
4 73	246	2,936	10,071	2,252	294	13,509	2,176,993	12,329
4 27	279	3,511	11,107	2,862	692	19,329	2,901,457	15,552
4 36	272	2,495	9,936	1,775	1,574	11,581	1,644,988	9,208
6 08	152	2,891	9,437	2,170	28	13,492	2,213,957	12,060
4 87	233	1,597	8,447	1,219	705	7,764	1,221,665	6,465
7 17	76	1,831	6,450	1,606	461	10,534	1,756,502	9,596
6 01	155	604	7,233	1,206	242	7,924	1,221,859	6,864
5 68	179	1,564	5,336	1,287	358	7,189	1,210,795	6,488
4 87	235	1,235	3,909	965	-	5,500	833,097	4,825
4 27	278	1,416	4,747	1,316	247	7,618	1,209,016	6,535
4 99	224	1,493	5,196	1,330	421	4,965	824,874	4,208
6 39	129	1,220	4,123	942	-	5,016	843,772	4,568
7 36	59	1,360	4,852	1,012	18	7,300	1,187,687	6,658
4 82	239	1,699	6,716	1,872	161	6,911	1,090,374	6,067
7 21	72	1,434	5,156	1,237	636	7,682	1,209,865	6,351
5 51	188	1,404	5,004	1,259	256	6,897	1,068,581	6,072
4 80	241	858	2,948	686	70	3,362	535,440	2,884
6 56	113	801	3,102	534	590	4,157	652,621	3,457
5 75	172	1,009	3,017	642	75	4,703	794,236	4,348
5 66	182	771	3,538	773	-	5,484	890,452	4,862
6 63	110	782	3,221	772	100	3,344	520,762	2,834
5 44	199	671	2,361	608	135	2,922	484,967	2,590
3 65	303	811	2,614	583	108	4,556	680,266	3,929
6 24	141	769	3,316	561	39	5,023	795,817	4,498
4 55	255	738	2,212	422	16	2,884	464,160	2,534
5 49	191	692	2,028	573	-	2,890	458,287	2,586
6 17	149	673	2,200	554	39	2,995	487,163	2,706
4 27	277	500	1,924	267	127	2,110	347,068	1,917
6 20	145	479	1,533	1,024	80	2,090	341,217	1,851
\$4 46	-	84,340	297,791	70,421	21,956	399,996	62,125,684	339,083

BOARD OF EDUCATION.

GROUP I. CITIES. — 1914-15 — *Con.*

CITIES.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — Con.		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
	Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
1 Boston, . . .	184	108,183	85	48	2,768	15	529	17,182
2 Worcester, . . .	187	23,732	39	6	753	4	145	3,396
3 Fall River, . . .	185	15,242	57	6	514	2	72	1,418
4 Lowell, . . .	178	11,982	13	7	312	1	49	1,626
5 Cambridge, . . .	186	15,504	25	2	463	2	94	2,628
6 New Bedford, . . .	189	13,176	32	21	350	1	41	1,175
7 Lynn, . . .	176	12,926	13	4	346	2	64	1,707
8 Springfield, . . .	187	16,632	14	12	597	3	131	2,441
9 Lawrence, . . .	179	9,772	29	5	300	1	35	1,071
10 Somerville, . . .	184	12,763	16	5	354	1	75	1,970
11 Holyoke, . . .	189	6,964	17	4	238	1	40	939
12 Brockton, . . .	189	10,111	30	8	292	1	63	1,632
13 Malden, . . .	179	7,327	10	4	222	1	52	1,264
14 Haverhill, . . .	186	6,988	11	5	225	1	34	817
15 Salem, . . .	172	5,176	6	3	151	1	35	968
16 Newton, . . .	185	7,058	10	7	267	2	65	1,635
17 Fitchburg, . . .	196	4,721	2	5	145	1	43	1,093
18 Taunton, . . .	183	4,770	4	2	161	1	19	527
19 Everett, . . .	178	6,990	12	3	198	1	37	961
20 Quincy, . . .	181	6,486	9	5	166	1	34	987
21 Chelsea, . . .	191	6,712	7	6	177	1	24	756
22 Pittsfield, . . .	191	6,488	15	7	210	1	37	1,002
23 Waltham, . . .	186	3,095	3	5	111	1	23	543
24 Chicopee, . . .	189	3,748	13	2	129	1	17	313
25 Gloucester, . . .	182	4,467	3	4	136	1	22	638
26 Medford, . . .	183	5,175	7	4	141	1	40	1,091
27 North Adams, . . .	185	3,064	8	6	102	1	18	481
28 Northampton, . . .	188	2,737	4	5	92	1	16	341
29 Beverly, . . .	183	4,238	9	6	137	1	32	960
30 Revere, . . .	177	4,797	6	2	122	1	17	480
31 Attleboro, . . .	183	2,669	4	2	85	1	12	359
32 Melrose, . . .	177	2,726	6	5	80	1	30	805
33 Woburn, . . .	180	2,827	1	—	76	1	16	498
34 Newburyport, . . .	181	2,017	—	4	63	1	17	472
35 Marlborough, . . .	186	1,947	5	4	60	1	16	479
Totals, . . .	183	363,210	525	224	10,543	58	1,994	54,655

SCHOOL RETURNS.

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GROUP I. CITIES. — 1914-15 — *Con.*

PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915 — *Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
2,729,675	185	15,714	\$1,221,667 50	\$77 74	\$977,890 06	\$62 23
567,545	187	3,206	245,022 40	76 42	198,454 75	61 90
240,130	185	1,347	108,971 33	80 90	81,520 75	60 52
255,600	178	1,503	423,830 70	47 65	50,212 27	33 40
427,614	186	2,405	146,195 55	60 79	113,358 61	47 13
184,296	191	994	81,262 43	81 75	55,904 00	56 24
266,632	175	1,599	104,828 76	65 56	75,114 10	46 98
415,086	184	2,377	219,527 26	92 35	162,635 61	68 42
171,605	180	995	50,093 27	50 35	39,430 80	39 63
348,496	184	1,998	116,555 21	58 34	83,466 45	41 77
160,083	189	883	64,526 70	73 08	49,670 39	56 25
271,921	189	1,513	89,423 21	59 10	71,579 50	47 31
196,058	179	1,170	68,796 21	58 80	51,932 00	44 39
143,852	186	809	48,063 58	59 41	34,069 11	42 11
152,351	177	898	49,159 08	54 74	33,260 65	37 04
270,862	185	1,542	110,365 63	71 57	87,766 03	56 91
180,853	196	1,028	57,991 19	56 41	45,432 04	44 19
94,508	187	496	27,014 47	54 46	19,266 08	38 84
154,605	180	893	53,972 72	60 44	36,822 36	41 23
165,047	189	922	41,779 73	45 31	34,393 69	37 30
124,587	191	702	38,702 02	55 13	28,509 94	40 61
180,193	191	986	51,260 78	51 99	40,791 00	41 37
89,608	185	508	33,675 68	66 29	23,569 16	46 40
54,130	190	300	23,789 43	79 30	18,228 55	60 76
108,824	187	601	29,264 75	48 69	18,630 00	31 00
187,227	186	1,059	54,719 46	51 67	42,904 90	40 51
80,464	188	448	25,537 44	57 00	18,756 26	41 87
57,201	188	314	22,066 77	70 09	15,775 00	50 24
151,879	183	895	49,046 06	54 80	33,869 20	37 84
72,825	178	443	25,733 59	58 09	18,095 17	40 85
60,444	184	343	18,373 34	53 57	13,250 77	38 63
129,430	179	751	41,035 15	54 64	28,661 68	38 16
81,803	180	464	17,718 85	38 19	13,632 66	29 38
80,273	180	458	13,934 46	30 42	9,732 73	21 25
78,246	189	440	19,182 16	43 60	13,900 00	31 59
8,933,980	185	51,004	\$3,793,026 87	\$74 37	\$2,640,486 27	\$51 77

BOARD OF EDUCATION.

GROUP I. CITIES. — 1914-15 — *Con.*

	CITIES.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
1	Boston,	\$235,748 11	\$76,725 14	\$303,985 63	\$81,145 00
2	Worcester,	11,560 68	19,262 44	76,567 50	11,415 00
3	Fall River,	5,981 39	13,273 72	69,896 32	8,362 20
4	Lowell,	149 50	12,572 52	24,297 75	6,240 63
5	Cambridge,	10,214 06	15,519 00	48,939 19	4,352 43
6	New Bedford,	5,295 35	11,451 22	39,406 52	11,788 21
7	Lynn,	11,988 70	7,393 78	26,407 37	5,698 34
8	Springfield,	—	29,922 59	36,259 00	14,019 75
9	Lawrence,	4,617 27	5,400 00	36,840 00	7,927 50
10	Somerville,	3,957 61	6,355 50	37,736 48	5,668 00
11	Holyoke,	4,311 08	6,875 44	26,716 03	4,839 47
12	Brockton,	—	7,870 16	37,650 50	7,150 00
13	Malden,	3,522 08	4,392 58	18,484 00	3,700 00
14	Haverhill,	—	6,443 67	16,614 22	3,850 00
15	Salem,	1,115 22	5,484 83	11,240 00	3,780 00
16	Newton,	7,101 43	6,764 22	26,116 00	8,819 45
17	Fitchburg,	2,405 97	5,578 76	3,950 00	3,825 00
18	Taunton,	2,636 62	3,804 20	7,400 00	2,550 00
19	Everett,	2,727 31	4,679 60	16,899 65	4,350 00
20	Quincy,	3,440 08	3,037 76	16,813 14	4,979 67
21	Chelsea,	825 00	3,016 00	13,592 14	7,170 00
22	Pittsfield,	1,316 91	5,860 41	18,982 90	7,069 00
23	Waltham,	1,008 89	3,403 66	6,495 00	3,671 65
24	Chicopee,	1,866 56	4,457 98	11,772 57	2,120 75
25	Gloucester,	1,176 13	3,369 16	16,700 00	—
26	Medford,	774 11	5,167 35	11,972 00	3,826 99
27	North Adams,	450 00	5,066 00	8,468 00	5,176 66
28	Northampton,	1,127 70	2,919 33	6,520 00	4,123 00
29	Beverly,	3,899 67	3,892 50	11,192 30	8,878 75
30	Revere,	1,773 95	3,285 22	9,266 40	2,483 00
31	Attleboro,	2,022 79	3,335 76	6,600 00	1,900 00
32	Melrose,	1,437 23	3,359 95	8,567 50	3,622 34
33	Woburn,	1,304 05	2,600 00	2,000 00	—
34	Newburyport,	—	3,055 98	—	2,539 59
35	Marlborough,	900 00	2,100 00	5,500 00	2,663 00
	Totals,	\$336,655 45	\$307,696 43	\$1,019,848 11	\$259,705 38

SCHOOL RETURNS.

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GROUP I. CITIES. — 1914-15 — *Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION —
YEAR ENDING JUNE 30, 1915 — *Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$3,563,879 12	\$98,168 53	\$149,750 79	\$325,306 50	\$176,285 31	\$69,707 40
680,346 03	19,610 38	25,127 06	70,559 71	39,223 13	16,268 30
377,794 26	11,428 90	15,911 72	60,641 97	20,413 64	3,504 38
240,943 92	11,495 84	9,197 20	51,009 85	24,408 38	3,293 30
441,498 08	9,957 18	14,465 93	54,855 88	21,568 18	1,477 31
311,439 39	7,802 26	14,369 62	41,926 56	20,382 79	7,327 34
280,262 15	11,184 38	11,773 74	36,132 28	21,454 82	2,236 74
545,932 30	20,363 15	45,996 65	55,704 12	41,114 34	13,458 70
240,591 68	7,651 88	6,350 94	24,174 28	16,561 09	4,350 64
291,057 49	7,708 12	15,125 47	26,597 47	17,870 17	9,882 80
199,707 13	3,493 95	7,544 12	23,468 38	14,167 24	6,095 31
240,483 91	6,972 82	12,562 84	24,080 52	16,683 69	8,117 44
169,292 66	5,844 00	8,323 03	17,002 40	15,516 41	4,264 05
150,696 06	5,514 71	6,690 14	20,968 39	13,366 41	4,955 02
107,884 53	7,525 53	5,243 76	17,728 90	9,113 55	1,042 33
231,564 63	4,934 60	8,549 27	21,973 84	14,551 54	2,043 32
128,094 23	5,730 36	6,807 43	12,639 53	3,440 93	2,297 50
114,176 64	5,902 54	3,259 34	11,788 25	10,429 95	2,021 32
143,823 93	5,330 79	8,123 39	17,288 33	11,418 08	4,243 59
134,816 34	3,866 49	4,916 00	12,965 35	8,147 80	1,978 19
138,665 10	6,675 39	7,472 32	17,785 09	8,536 51	3,597 54
157,599 85	7,182 48	8,299 32	15,189 97	4,923 85	1,912 89
90,393 40	2,167 68	4,823 34	8,815 95	6,985 31	2,867 23
78,228 12	2,003 06	3,233 81	9,460 96	10,382 75	2,484 22
75,067 00	2,654 06	7,655 91	11,894 01	8,032 14	1,255 81
117,409 09	4,518 98	4,803 63	12,127 65	12,517 49	1,940 51
65,944 29	3,471 41	1,608 54	7,520 65	5,987 89	1,131 63
59,495 94	1,239 42	3,230 23	8,158 29	7,304 11	613 72
103,389 25	6,922 78	5,842 96	11,577 35	7,821 25	2,226 66
87,186 73	4,996 79	4,448 70	13,284 18	7,071 86	1,857 55
57,418 39	1,510 22	2,759 20	9,641 58	7,432 63	1,892 10
62,204 19	2,407 67	3,304 31	8,268 71	7,066 16	1,521 66
53,832 05	2,229 00	2,188 81	5,657 60	4,402 80	774 89
39,425 46	1,765 62	2,424 10	4,264 12	5,246 42	549 41
40,453 24	2,450 38	2,271 94	4,620 00	4,293 83	1,583 57
\$9,820,996 58	\$312,681 35	\$444,455 56	\$1,075,078 62	\$624,122 45	\$194,774 37

GROUP I. CITIES. — 1914-15 — *Con.*

	CITIES.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
1	Boston,	\$288,296 37	—	\$33,063 87
2	Worcester,	58,454 83	\$604 35	3,991 15
3	Fall River,	31,802 75	—	2,008 00
4	Lowell,	4,836 88	—	3,485 88
5	Cambridge,	5,650 24	—	—
6	New Bedford,	8,776 05	—	2,380 00
7	Lynn,	15,768 66	—	2,200 00
8	Springfield,	45,510 19	—	9,289 42
9	Lawrence,	22,835 56	—	2,200 00
10	Somerville,	27,805 33	—	3,567 44
11	Holyoke,	6,683 63	101 02	1,600 93
12	Brockton,	13,467 01	—	4,632 46
13	Malden,	11,413 05	—	700 00
14	Haverhill,	11,274 23	—	—
15	Salem,	7,169 13	—	770 00
16	Newton,	23,580 37	—	3,925 09
17	Fitchburg,	9,977 76	236 40	1,910 35
18	Taunton,	12,055 41	70 35	800 00
19	Everett,	9,145 43	—	2,146 30
20	Quincy,	7,167 32	—	600 00
21	Chelsea,	6,940 05	—	1,400 00
22	Pittsfield,	—	—	1,422 49
23	Waltham,	15,087 55	—	1,300 04
24	Chicopee,	4,041 89	—	—
25	Gloucester,	7,934 59	—	967 00
26	Medford,	3,741 12	18 89	379 05
27	North Adams,	4,542 23	—	1,000 00
28	Northampton,	4,286 24	—	1,001 46
29	Beverly,	5,153 49	—	729 98
30	Revere,	5,319 73	3 13	466 15
31	Attleboro,	3,892 34	—	400 00
32	Melrose,	4,264 81	—	—
33	Woburn,	2,365 59	—	315 00
34	Newburyport,	1,380 37	—	300 00
35	Marlborough,	823 27	—	362 00
	Totals,	\$691,443 47	\$1,034 14	\$89,314 06

SCHOOL RETURNS.

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GROUP I. CITIES. — 1914-15 — *Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$1,189 43	\$120,322 14	\$5,523,573 34	\$888,628 64	\$70,022 28	\$958,650 92
630 75	6,334 73	1,039,956 04	266,818 65	10,215 60	277,034 25
967 00	3,376 42	625,362 67	60,512 91	—	60,512 91
290 75	31,608 30 ¹	423,830 70	26,252 76	—	26,252 76
388 80	3,738 93	632,625 21	40,164 20	—	40,164 20
1,055 00	2,061 12	485,461 43	14,001 46	1,193 21	15,194 67
750 00	5,087 72	438,338 68	332,586 64	2,795 38	335,382 02
1,507 50	—	859,077 71	706,260 25	14,891 43	721,151 68
—	6,985 01	386,485 85	93,453 00	4,576 81	98,029 81
—	2,142 70	455,474 58	9,380 99	364 10	9,745 09
1,372 40	1,836 34	308,812 47	19,855 84	4,077 49	23,933 33
1,267 75	—	380,939 10	165,174 19	5,149 01	170,323 20
—	1,391 00	263,845 26	12,980 40	1,116 50	14,096 90
3,313 00	558 72	244,244 57	65,131 15	3,510 17	68,641 32
586 00	14,764 17	193,447 95	57,293 59	2,859 33	60,152 92
2,568 00	863 72	363,355 48	—	1,347 68	1,347 68
1,960 00	352 66	189,206 88	—	1,018 69	1,018 69
1,741 00	1,072 00	179,707 62	23,444 25	5,383 28	28,827 53
—	1,692 39	231,868 79	189,557 48	476 00	190,033 48
1,596 00	988 29	205,312 43	21,616 58	246 35	21,862 93
—	—	215,675 14	—	—	—
3,954 25	2,322 40	236,036 72	—	—	—
925 50	1,425 64	149,370 84	—	—	—
3,635 00	1,321 49	135,009 16	5,378 73	516 19	5,894 92
3,799 50	3,058 55	143,563 86	7,025 59	995 17	8,020 76
—	611 73	179,808 59	—	32 36	32 36
1,721 50	1,791 75	113,880 55	—	—	—
1,107 34	3,097 37	104,224 15	161,727 72	8,063 48	169,791 20
5,548 20	1,146 42	178,221 56	—	350 23	350 23
31 45	560 33	142,035 17	2,668 67	3,891 06	6,559 73
3,554 25	715 12	103,074 38	630 88	36 00	666 88
695 00	1,561 29	108,280 82	1,497 71	—	1,497 71
42 00	432 98	78,144 77	262 89	626 30	889 19
150 00	84 00	61,185 07	—	—	—
2,721 82	—	70,743 05	—	—	—
\$49,069 19	\$223,305 43	\$15,450,180 59	\$3,172,305 17	\$143,754 10	\$3,316,059 27

¹ Includes the total paid to State for the maintenance expense of the training schools, connected with the normal school, in accordance with agreement between State Board of Education and School Committee of Lowell.

GROUP I. CITIES.—1914-15—*Con.*

	CITIES.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— FOR LAST PRECEDING CITY FISCAL YEAR.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
1	Boston,	\$5,549,647 89	\$51 30	26	—
2	Worcester,	987,561 65	41 61	57	\$36 50
3	Fall River,	607,705 74	39 87	67	—
4	Lowell,	418,933 43	34 96	126	—
5	Cambridge,	612,904 13	39 53	70	1,005 00
6	New Bedford,	470,116 41	35 68	118	—
7	Lynn,	426,719 98	33 01	160	470 50
8	Springfield,	769,725 51	46 28	41	179 50
9	Lawrence,	348,200 38	35 63	119	—
10	Somerville,	455,898 21	35 72	116	—
11	Holyoke,	308,836 31	44 35	46	—
12	Brookton,	377,782 88	37 36	92	396 50
13	Malden,	254,922 62	34 79	133	—
14	Haverhill,	240,410 71	34 40	137	94 50
15	Salem,	193,013 87	37 29	94	146 50
16	Newton,	357,156 37	50 60	28	214 50
17	Fitchburg,	187,687 94	39 76	68	110 50
18	Taunton,	167,902 84	35 20	124	434 50
19	Everett,	234,170 55	33 50	152	165 50
20	Quincy,	197,352 08	30 43	195	337 50
21	Chelsea,	210,599 72	31 38	184	—
22	Pittsfield,	221,979 40	34 21	144	115 00
23	Waltham,	150,116 83	48 50	32	327 29
24	Chicopee,	123,354 63	32 91	162	—
25	Gloucester,	149,091 33	33 38	155	42 00
26	Medford,	168,244 26	32 51	168	829 50
27	North Adams,	109,553 48	35 76	114	—
28	Northampton,	98,116 57	35 85	112	81 50
29	Beverly,	163,030 94	38 47	79	234 50
30	Revere,	135,502 56	28 25	234	186 50
31	Attleboro,	96,425 03	36 13	107	—
32	Melrose,	101,852 25	37 36	93	—
33	Woburn,	76,089 57	26 92	256	707 00
34	Newburyport,	54,850 00	27 19	249	125 27
35	Marlborough,	68,276 24	35 07	125	281 56
	Totals,	\$15,093,732 31	\$41 56	—	\$6,521 62

SCHOOL RETURNS.

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GROUP I. CITIES. — 1914-15 — *Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — FOR LAST PRECEDING CITY FISCAL YEAR.				Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
From other sources.	FROM ALL SOURCES.				
	Amount.	Per pupil in average membership.	Rank.		
\$8,131 83	\$5,557,779 72	\$51 37	76	—	—
8,223 76	995,821 91	41 96	144	—	—
15,663 90	623,369 64	40 90	157	—	—
—	418,933 43	34 96	233	—	—
7,019 66	620,928 79	40 05	172	—	—
3,319 53	473,435 94	35 93	216	—	—
4,200 68	431,391 16	33 37	263	—	—
21,253 03	791,158 04	47 57	94	—	—
—	348,200 38	35 63	224	—	—
—	455,898 21	35 72	221	—	—
2,486 93	311,323 24	44 71	118	—	—
2,059 70	380,239 08	37 61	197	—	—
—	254,922 62	34 79	239	—	—
3,355 26	243,860 47	34 90	235	—	—
406 62	193,566 99	37 40	202	—	—
3,552 00	360,922 87	51 14	77	—	—
581 00	188,379 44	39 90	174	—	—
8,135 85	176,473 19	37 00	204	—	—
110 25	234,446 30	33 54	262	—	—
58 55	197,748 13	30 49	311	—	—
—	210,599 72	31 38	293	—	—
3,064 40	225,158 80	34 70	243	—	—
—	150,444 12	48 61	88	—	—
—	123,354 63	32 91	272	—	—
971 88	150,105 21	33 60	261	—	—
578 10	169,651 86	32 78	275	—	—
2,267 86	111,821 34	36 50	209	—	—
1,788 70	99,986 77	36 53	208	—	—
2,190 04	165,455 48	39 04	182	—	—
—	135,689 06	28 29	329	—	—
1,745 06	98,170 09	36 78	206	—	—
2,851 23	104,703 48	38 41	187	—	—
1,018 00	77,814 57	27 53	334	—	—
3,765 05	58,740 32	29 12	321	—	—
1,830 87	70,388 67	36 15	214	—	—
\$110,629 74	\$15,210,883 67	\$41 88	—	—	—

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15.

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
36	Brookline, . . .	27,792	\$121,526,100	\$29,361	6	\$14 50	288
37	Leominster, . . .	17,580	13,419,395	5,318	179	21 50	69
38	Westfield, . . .	16,044	12,470,311	4,098	266	22 60	37
39	Peabody, . . .	15,721	15,067,900	5,639	160	18 60	172
40	Gardner, . . .	14,699	11,346,367	5,209	183	19 30	141
41	Clinton, . . .	13,075	9,264,601	4,901	202	26 00	1
42	Milford, . . .	13,055	10,153,393	4,691	217	20 70	96
43	Adams, . . .	13,026	6,825,684	4,378	237	20 40	108
44	Frammingham, . .	12,948	16,495,062	6,440	124	19 00	154
45	Weymouth, . . .	12,895	12,020,680	4,866	203	18 25	185
46	Watertown, . . .	12,875	17,988,700	8,121	79	21 20	76
47	Southbridge, . . .	12,592	7,734,468	7,296	94	21 00	86
48	Plymouth, . . .	12,141	13,820,510	5,985	143	18 40	182
49	Webster, . . .	11,509	8,442,391	9,048	58	14 90	286
50	Methuen, . . .	11,448	9,387,141	3,792	288	20 70	95
51	Wakefield, . . .	11,404	11,916,280	5,138	186	23 40	19
52	Arlington, . . .	11,187	15,812,813	5,817	147	21 10	78
53	Greenfield, . . .	10,427	13,040,972	6,065	135	16 20	253
54	Winthrop, . . .	10,132	16,282,150	7,272	96	21 00	88
55	Amesbury, . . .	9,894	6,704,664	8,029	80	21 10	77
56	Natick, . . .	9,866	9,117,900	4,821	209	21 60	66
57	North Attleborough,	9,562	9,690,260	6,148	134	20 50	104
58	Danvers, . . .	9,407	7,747,500	4,372	239	20 40	109
59	Winchester, . . .	9,309	18,631,500	10,478	45	17 40	218
60	Dedham, . . .	9,284	16,236,715	7,768	85	18 00	194
61	West Springfield, .	9,224	9,668,984	4,339	244	17 00	239
62	Northbridge, . . .	8,807	5,581,680	3,377	324	18 50	176
63	Ware, . . .	8,774	5,304,315	3,943	279	19 30	145
64	Palmer, . . .	8,610	5,258,470	3,206	330	22 00	58
65	Athol, . . .	8,536	6,507,870	4,155	263	22 40	40
66	Easthampton, . . .	8,524	7,494,160	5,818	148	19 00	153
67	Middleborough, . .	8,214	4,965,765	3,474	317	23 00	28
68	Braintree, . . .	8,066	8,920,759	5,071	191	18 80	163
69	Saugus, . . .	8,047	6,943,355	3,298	329	25 40	8
70	Norwood, . . .	8,014	16,299,795	8,194	77	11 00	335
71	Milton, . . .	7,924	31,602,839	21,900	14	11 80	329
72	Bridgewater, . . .	7,688	4,612,093	4,246	253	17 00	230
73	Marblehead, . . .	7,338	11,110,946	8,398	71	22 00	53
74	Andover, . . .	7,301	8,592,780	8,679	65	18 00	188
75	Whitman, . . .	7,292	5,640,013	4,150	265	22 90	31
76	Stoneham, . . .	7,090	5,905,362	5,334	177	22 70	36
77	Rockland, . . .	6,928	5,427,973	4,549	227	22 40	41
78	Montague, . . .	6,866	5,148,920	4,269	251	17 80	207
79	Hudson, . . .	6,743	4,231,957	3,889	283	21 70	62
80	Spencer, . . .	6,740	3,644,675	5,598	164	15 50	277

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15.

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS—KINDERGARTEN, ELEMENTARY AND HIGH—YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily attendance.
\$2 19	342	714	2,837	804	—	4,702	869,870	3,873
6 36	131	601	2,571	554	217	2,689	442,372	2,385
7 05	87	761	2,207	501	240	2,949	532,043	2,868
6 09	151	611	2,109	387	246	2,829	452,490	2,511
5 99	157	560	2,048	449	196	2,352	380,333	2,045
7 34	61	487	1,604	374	120	2,089	329,926	1,801
6 40	127	498	1,879	443	62	2,327	374,326	2,058
7 70	46	443	1,872	479	148	1,692	278,769	1,501
4 43 ¹	266 ¹	535	1,685	431	105	2,635	441,381	2,406
6 32	134	507	1,554	406	—	2,602	441,969	2,323
4 64	252	535	1,711	404	84	2,319	371,411	2,074
4 57	254	462	1,623	325	235	1,233	186,158	988
5 45	198	519	1,567	378	118	2,395	420,039	2,198
5 00	223	455	1,848	395	23	1,025	161,336	882
6 91	93	709	1,936	449	123	2,617	409,662	2,314
6 45	122	436	1,487	371	94	2,578	465,560	2,112
5 87	167	550	1,739	424	23	3,008	485,641	2,573
5 89	165	433	1,384	350	68	2,319	392,962	2,085
4 78	244	446	1,364	347	1	2,377	387,967	2,094
5 01	221	317	955	262	13	894	148,278	790
7 10	82	364	1,125	494	29	2,069	372,667	1,817
6 32	133	318	1,076	242	52	1,730	266,925	1,491
6 20	144	338	1,112	288	8	1,908	309,646	1,674
4 43	267	280	1,202	431	27	1,862	299,609	1,685
4 77	245	451	1,430	339	21	2,165	354,554	1,954
7 25	68	390	1,361	273	69	2,518	374,924	2,088
8 56	25	314	1,254	263	2	1,762	287,272	1,603
7 71	45	366	1,221	276	127	1,423	227,181	1,272
8 83	17	318	997	164	2	1,719	286,661	1,582
7 06	85	272	1,003	249	13	1,687	278,400	1,483
6 00	156	333	1,039	190	202	1,379	218,195	1,213
8 65	21	255	917	264	—	1,632	259,722	1,352
6 25	140	399	1,205	241	—	2,035	313,098	1,650
8 52	26	371	1,464	285	3	2,223	362,495	1,946
4 42	268	357	1,287	331	64	2,032	348,002	1,886
2 93	333	297	961	238	—	1,559	241,237	1,341
8 06	36	202	661	158	53	1,175	170,087	1,021
3 46	311	76	870	243	—	1,424	223,795	1,211
4 29	276	167	924	294	3	1,058	163,777	928
7 95	40	241	812	231	—	1,404	319,493	1,319
6 91	94	264	844	213	24	1,175	170,980	1,001
6 52	117	222	764	204	6	1,245	216,049	1,153
7 57 ²	49 ²	192	843	185	103	1,262	210,650	1,144
6 99	90	213	765	176	95	1,129	191,909	1,040
8 30	32	181	697	190	—	719	108,378	592

¹ Based on expenditures for 10 months only.

² Based on expenditures for 11 months only.

BOARD OF EDUCATION.

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
	Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
36 Brookline, . . .	185	4,139	4	—	179	1	40	798
37 Leominster, . . .	186	2,523	1	5	82	1	18	456
38 Westfield, . . .	188	3,043	7	6	98	1	18	379
39 Peabody, . . .	182	2,672	1	3	84	1	18	497
40 Gardner, . . .	186	2,178	—	4	56	1	13	402
41 Clinton, . . .	183	1,890	1	—	63	1	11	335
42 Milford, . . .	182	2,164	11	—	54	1	10	283
43 Adams, . . .	186	1,559	5	3	46	1	7	219
44 Framingham, . .	183	2,561	5	4	74	1	14	397
45 Weymouth, . . .	191	2,470	11	4	69	1	11	326
46 Watertown, . . .	183	2,215	3	6	66	1	14	307
47 Southbridge, . .	188	1,060	—	—	39	1	8	138
48 Plymouth, . . .	191	2,309	2	—	73	1	11	281
49 Webster, . . .	183	933	—	5	35	1	7	180
50 Methuen, . . .	177	2,475	1	4	73	1	10	248
51 Wakefield, . . .	182	2,319	4	2	74	1	18	476
52 Arlington, . . .	189	2,718	6	5	76	1	19	574
53 Greenfield, . . .	189	2,150	1	3	73	1	14	311
54 Winthrop, . . .	181	2,239	2	2	69	1	23	553
55 Amesbury, . . .	187	835	1	—	32	1	11	227
56 Natick, . . .	182	1,891	10	4	42	1	13	386
57 North Attleborough,	179	1,576	7	4	43	1	9	214
58 Danvers, . . .	179	1,772	5	3	43	1	9	310
59 Winchester, . . .	178	1,778	2	3	64	1	19	358
60 Dedham, . . .	181	2,090	4	2	67	1	16	357
61 West Springfield, .	185	2,228	3	5	63	1	12	304
62 Northbridge, . .	192	1,652	—	2	46	1	6	168
63 Ware, . . .	181	1,345	1	2	38	1	7	149
64 Palmer, . . .	181	1,640	1	2	47	1	8	171
65 Athol, . . .	188	1,566	1	2	45	1	9	282
66 Easthampton, . .	180	1,288	—	—	46	1	10	224
67 Middleborough, .	191	1,429	—	3	45	1	8	248
68 Braintree, . . .	190	1,759	—	3	54	1	9	257
69 Saugus, . . .	186	2,105	7	4	60	1	10	289
70 Norwood, . . .	184	1,989	5	3	63	1	10	228
71 Milton, . . .	179	1,443	—	1	66	1	19	317
72 Bridgewater, . .	185	1,086	2	2	40	1	8	136
73 Marblehead, . . .	185	1,323	5	3	43	1	10	215
74 Andover, . . .	177	990	—	5	35	—	—	—
75 Whitman, . . .	184	1,359	—	3	36	1	9	233
76 Stoneham, . . .	170	1,107	1	5	35	1	11	314
77 Rockland, . . .	187	1,193	3	3	32	1	10	244
78 Montague, . . .	188	1,206	9	4	41	1	11	280
79 Hudson, . . .	184	1,088	2	2	27	1	8	257
80 Spencer, . . .	183	651	1	2	23	1	5	105

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915—*Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
131,350	185	717	\$67,530 81	\$94 19	\$59,357 78	\$82 79
80,506	195	428	24,184 98	56 51	15,473 50	36 15
63,480	190	346	26,624 19	76 95	19,585 00	56 60
82,218	180	465	26,107 25	56 14	18,638 00	40 08
64,589	192	361	17,982 01	49 81	11,582 40	32 08
52,184	183	303	19,143 27	63 18	12,408 82	40 95
48,814	184	272	10,981 75	40 37	7,996 61	29 40
36,289	186	201	10,184 48	50 66	7,097 85	35 31
69,498	198	370	23,634 53	63 88	14,762 18	39 90
54,605	192	301	15,920 83	52 89	10,580 00	35 15
53,143	190	292	19,582 20	67 06	13,465 26	46 11
22,350	188	126	7,277 54	57 76	5,953 43	47 25
48,095	186	270	13,358 38	49 48	9,198 60	34 07
30,339	182	173	13,727 17	79 35	8,361 00	48 33
44,348	200	232	11,930 41	51 42	8,924 50	38 46
75,838	180	444	20,450 17	46 06	16,217 60	36 53
98,685	184	549	28,690 46	52 26	20,503 52	37 35
49,936	189	276	18,508 18	67 06	12,020 00	43 55
87,904	181	516	30,044 56	58 23	22,735 00	44 06
38,974	192	214	10,108 99	47 24	7,907 17	36 95
71,410	185	360	17,144 35	47 62	13,589 00	37 75
36,065	193	199	12,771 58	64 18	8,880 00	44 62
37,972	179	283	10,531 75	37 21	8,080 25	28 55
57,995	180	337	26,629 91	79 02	21,046 81	62 45
58,721	184	335	17,241 51	51 47	14,300 00	42 69
51,105	194	282	14,971 77	53 09	11,059 26	39 22
30,551	198	154	8,364 93	54 32	5,104 00	33 14
24,512	181	141	9,510 76	67 45	6,237 25	44 24
30,876	195	164	11,736 24	72 90	7,175 00	44 57
47,500	190	255	11,088 54	43 48	8,330 00	32 67
36,880	196	201	13,755 92	68 44	9,993 85	49 72
43,608	191	235	12,838 35	54 63	8,700 00	37 02
40,983	190	231	10,961 55	47 45	7,460 00	32 29
47,467	188	269	10,970 58	40 78	7,612 30	28 30
38,065	184	215	12,205 55	56 77	9,156 52	42 59
50,866	178	298	25,998 51	87 24	18,536 84	62 20
23,787	192	133	11,018 59	82 85	6,472 50	48 67
35,611	185	203	14,067 13	69 30	9,700 00	47 93
—	—	—	—	—	—	—
40,377	184	224	10,605 68	47 35	7,624 50	34 04
47,743	173	292	13,054 85	44 71	9,332 50	31 96
42,449	188	232	11,022 60	47 51	8,093 75	34 89
46,691	194	272	15,099 78	55 51	7,388 40	27 16
43,240	188	240	9,808 11	40 87	6,100 00	25 42
19,504	198	103	5,686 61	55 21	3,950 00	38 35

BOARD OF EDUCATION.

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

TOWNS.		EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
36	Brookline,	—	\$11,333 33	—	\$5,740 00
37	Leominster,	\$1,318 99	3,071 06	\$2,162 00	3,804 40
38	Westfield,	2,169 94	2,527 71	9,562 00	4,959 00
39	Peabody,	991 18	3,146 93	2,100 00	1,900 00
40	Gardner,	767 44	2,239 01	7,327 65	3,780 00
41	Clinton,	—	4,388 95	2,313 50	—
42	Milford,	236 06	2,190 91	7,428 75	—
43	Adams,	234 05	2,764 39	5,830 41	2,280 77
44	Framingham,	1,679 34	2,901 95	10,155 00	2,775 00
45	Weymouth,	107 00	2,199 93	10,200 00	3,000 00
46	Watertown,	1,258 13	2,375 00	6,024 00	4,818 75
47	Southbridge,	136 47	2,653 75	—	—
48	Plymouth,	496 99	2,280 40	6,683 75	—
49	Webster,	540 00	2,030 23	—	1,766 00
50	Methuen,	167 27	2,902 56	1,800 00	3,686 70
51	Wakefield,	1,189 32	2,719 62	8,616 89	1,655 95
52	Arlington,	404 59	3,213 13	8,210 00	5,102 50
53	Greenfield,	3 75	3,120 08	1,900 00	4,988 95
54	Winthrop,	100 00	2,925 00	1,960 00	1,350 00
55	Amesbury,	428 29	1,914 76	1,814 59	—
56	Natick,	—	2,285 00	9,105 00	3,338 00
57	North Attleborough,	797 65	2,482 48	6,800 46	3,227 95
58	Danvers,	122 83	2,161 45	5,900 00	2,177 25
59	Winchester,	1,635 96	2,943 16	4,283 37	1,620 15
60	Dedham,	—	3,820 36	6,800 00	1,250 00
61	West Springfield,	1,071 03	3,049 07	8,192 89	5,118 25
62	Northbridge,	118 26	2,410 33	4,944 00	1,088 75
63	Ware,	—	2,000 00	1,800 00	1,100 00
64	Palmer,	203 29	2,717 89	1,400 00	1,350 00
65	Athol,	—	2,166 66	4,965 00	1,120 52
66	Easthampton,	561 58	2,141 46	5,318 75	—
67	Middleborough,	150 00	2,560 00	6,216 00	1,628 80
68	Braintree,	190 00	2,093 00	7,135 00	1,500 00
69	Saugus,	429 19	2,519 62	6,532 00	2,970 00
70	Norwood,	1,392 07	2,509 93	6,453 88	1,987 22
71	Milton,	1,202 23	3,238 50	10,124 00	2,253 07
72	Bridgewater,	—	1,247 58	3,000 00	850 00
73	Marblehead,	—	2,000 00	5,450 00	1,170 00
74	Andover,	569 67	2,172 40	—	1,466 65
75	Whitman,	349 20	2,191 18	—	2,700 00
76	Stoneham,	176 17	1,395 00	2,000 00	2,310 00
77	Rockland,	112 99	1,678 33	3,090 00	1,669 02
78	Montague,	581 95	1,706 39	1,360 00	2,401 50
79	Hudson,	220 29	1,587 64	3,176 00	1,219 00
80	Spencer,	166 19	688 93	4,143 00	710 00

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—
YEAR ENDING JUNE 30, 1915—*Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$196,179 97	\$5,108 02	\$12,424 95	\$20,217 43	\$10,035 99	\$4,202 07
52,683 38	2,012 13	3,980 68	7,337 82	2,664 36	836 90
57,980 10	3,351 76	5,498 06	5,480 13	6,901 12	1,146 50
58,134 81	3,202 38	2,788 73	7,443 99	4,826 52	1,766 97
29,863 25	1,797 56	3,381 68	3,592 81	4,934 59	679 44
42,937 52	1,699 28	1,695 24	5,985 84	1,443 53	1,377 94
32,692 63	1,860 97	1,328 37	3,647 15	4,007 62	855 08
29,529 71	925 23	1,578 87	3,284 75	4,720 46	842 69
46,450 80	2,327 72	4,528 36	5,984 38	4,633 95	917 25
38,506 00	2,396 37	2,501 64	5,439 50	4,697 88	671 59
48,414 90	1,473 48	3,092 19	7,500 81	6,323 75	1,151 47
23,898 54	1,180 01	1,382 35	2,624 50	1,760 74	562 20
42,157 50	2,453 90	1,899 35	5,480 34	5,763 81	2,652 91
25,037 55	1,466 49	2,361 13	4,161 85	1,523 74	839 00
42,130 64	1,376 37	2,690 42	5,246 50	5,710 61	479 85
47,830 89	1,827 41	1,695 36	4,767 24	4,899 33	1,237 00
58,023 64	2,689 46	3,450 41	5,997 58	3,502 62	1,556 78
41,616 26	2,494 21	2,996 90	5,106 57	7,589 17	1,793 21
54,537 00	3,000 00	3,800 00	4,928 00	3,810 84	2,175 00
18,277 75	612 23	1,710 22	2,670 00	1,802 73	340 65
28,485 36	4,416 85	—	4,968 50	4,173 81	—
29,036 38	1,589 16	2,692 15	3,989 12	371 80	800 25
26,338 52	1,355 89	1,193 42	3,611 18	2,263 09	256 96
52,104 31	1,769 31	3,969 92	5,371 01	3,727 24	760 15
49,011 00	1,584 43	3,075 99	4,775 00	2,775 90	730 48
37,492 08	3,464 97	2,550 47	5,713 05	3,425 06	748 13
22,308 21	1,115 46	1,018 57	4,202 30	4,427 99	865 09
23,139 63	1,130 70	1,346 73	3,762 80	3,723 73	797 70
25,858 28	1,438 72	2,570 39	2,568 50	3,469 56	981 86
22,463 20	1,717 70	1,952 72	3,512 25	3,821 08	993 28
24,386 38	1,709 24	2,388 35	3,264 29	4,612 22	396 19
20,628 00	1,200 00	920 48	2,000 00	1,953 07	281 87
28,955 00	1,498 47	1,039 72	4,756 00	2,700 00	827 48
28,803 71	1,820 50	2,773 69	4,446 44	1,978 09	886 70
43,887 57	2,044 36	1,298 53	4,822 10	3,657 25	757 90
47,203 86	1,252 21	3,937 01	7,679 25	3,947 93	2,677 19
21,348 35	944 85	744 05	1,900 00	1,923 10	2,263 25
28,209 04	1,400 07	2,315 92	3,591 65	1,847 54	—
21,610 04	482 78	763 74	2,220 55	3,412 17	578 32
27,031 68	937 68	1,577 47	3,636 32	2,512 80	396 52
23,645 50	873 28	1,436 31	2,779 20	2,883 12	833 65
22,552 02	899 42	551 01	2,936 25	2,444 27	963 10
22,543 31	1,565 55	2,948 94	2,071 70	4,335 49	1,740 86
14,890 01	850 42	1,156 48	1,962 90	2,111 39	498 09
10,114 00	592 96	460 23	2,443 00	1,123 89	43 77

BOARD OF EDUCATION.

GROUP II. TOWNS. POPULATION 5,000 OR OVER.— 1914-15 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
36	Brookline,	\$10,248 34	—	\$1,301 00
37	Leominster,	2,158 44	—	660 00
38	Westfield,	4,237 88	\$87 75	500 00
39	Peabody,	6,734 09	—	1,215 10
40	Gardner,	1,474 57	—	360 76
41	Clinton,	3,658 33	11 88	1,281 90
42	Milford,	2,073 08	—	519 80
43	Adams,	2,488 70	—	500 00
44	Frammingham,	3,656 22	—	1,033 00
45	Weymouth,	2,947 25	—	233 00
46	Watertown,	1,503 04	—	1,000 00
47	Southbridge,	1,021 42	—	124 35
48	Plymouth,	3,224 17	153 98	1,134 53
49	Webster,	1,919 23	—	320 95
50	Methuen,	1,763 11	—	249 25
51	Wakefield,	1,872 21	—	230 75
52	Arlington,	3,206 68	—	1,550 00
53	Greenfield,	5,443 67	—	504 55
54	Winthrop,	1,012 19	—	200 00
55	Amesbury,	3,547 74	—	661 40
56	Natick,	2,147 50	—	250 00
57	North Attleborough,	2,481 05	—	171 50
58	Danvers,	2,721 05	—	298 65
59	Winchester,	5,040 39	48 48	1,415 16
60	Dedham,	4,362 09	—	1,233 59
61	West Springfield,	2,248 24	72 09	542 98
62	Northbridge,	2,619 44	—	380 00
63	Ware,	2,329 96	—	546 50
64	Palmer,	1,184 43	—	200 00
65	Athol,	1,324 05	—	312 27
66	Easthampton,	1,216 52	—	14 00
67	Middleborough,	1,861 46	—	300 00
68	Braintree,	3,187 40	—	—
69	Saugus,	4,451 65	—	452 25
70	Norwood,	1,215 00	140 51	971 81
71	Milton,	3,287 51	183 40	849 93
72	Bridgewater,	1,303 84	—	125 00
73	Marblehead,	1,769 17	—	800 00
74	Andover,	2,114 57	—	158 34
75	Whitman,	1,329 16	—	255 40
76	Stoneham,	1,435 90	24 72	150 00
77	Rockland,	1,336 82	10 00	18 83
78	Montague,	1,674 91	—	188 50
79	Hudson,	1,517 11	11 60	200 00
80	Spencer,	888 61	—	29 50

SCHOOL RETURNS.

XXV

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION —YEAR ENDING JUNE 30, 1915— <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$2,396 00	\$3,195 84	\$282,382 94	\$38,221 43	\$13,142 55	\$51,363 98
2,488 40	331 65	85,510 21	1,008 01	573 31	1,581 32
2,898 91	1,269 47	108,570 33	70,772 31	7,787 09	78,559 40
2,310 08	1,742 00	98,302 78	—	—	—
1,480 30	575 70	62,254 76	5,751 77	1,101 53	6,853 30
50	954 26	67,748 67	—	3,409 63	3,409 63
1,936 47	175 75	58,952 64	9,106 75	2,839 12	11,945 87
244 50	389 60	55,614 13	—	54 77	54 77
4,380 99	530 22	91,954 18	52,515 48	1,863 14	54,378 62
2,945 50	530 02	76,375 68	—	—	—
—	623 98	85,559 50	73,306 13	2,497 70	75,803 83
1,530 00	245 23	37,119 56	244 50	—	244 50
1,592 00	186 70	76,160 33	28,942 86	5,279 01	34,221 87
820 60	602 74	43,389 51	1,450 57	361 55	1,812 12
1,445 00	1,058 47	70,706 75	33,880 31	490 45	34,370 76
—	682 02	79,223 99	260 75	672 72	933 47
—	1,225 56	98,132 95	64,618 43	—	64,618 43
2,171 47	1,178 17	80,906 96	—	549 36	549 36
475 00	975 78	81,248 81	17,000 00	700 00	17,700 00
1,519 95	53 50	35,353 81	550 00	—	550 00
1,191 78	—	60,361 80	—	—	—
328 00	668 90	55,436 85	—	360 79	360 79
950 00	709 02	50,059 31	750 00	—	750 00
686 00	718 60	86,093 21	10 00	766 49	776 49
607 45	465 99	80,492 28	17,925 21	—	17,925 21
825 00	635 41	75,148 72	504 00	1,979 38	2,483 38
1,326 50	33 25	46,858 15	—	—	—
1,247 95	818 83	43,744 53	12,277 45	722 55	13,000 00
2,417 80	994 97	47,355 69	266 35	791 89	1,058 24
3,001 80	770 46	48,120 99	27,592 37	1,097 10	28,689 47
2,302 60	482 89	48,794 47	2,533 75	89 93	2,623 68
2,925 00	434 45	43,059 13	—	—	—
1,700 00	1,943 72	57,525 79	8,030 00	—	8,030 00
598 00	855 71	59,517 55	—	786 20	786 20
665 00	447 85	72,250 98	1,110 21	854 72	1,964 93
1,985 00	507 60	90,328 69	896 75	925 36	1,822 11
2,772 80	288 96	38,711 78	—	—	—
369 86	1,168 85	50,092 10	118,056 90	16,010 00	134,066 90
2,468 73	526 31	38,544 27	2,743 40	4 00	2,747 40
519 00	461 98	43,898 39	—	988 62	988 62
425 00	1,986 02	42,353 87	96 07	181 32	277 39
—	567 99	38,830 05	4,743 42	1,000 11	5,743 53
3,519 63	—	46,638 73	—	1,010 81	1,010 81
982 40	253 95	30,637 28	—	450 00	450 00
1,742 52	710 54	23,857 14	—	—	—

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

TOWNS.		TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING DEC. 31, 1914.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
36	Brookline,	\$266,149 52	\$64 30	9	—
37	Leominster,	85,335 19	33 82	147	—
38	Westfield,	87,900 00	28 89	226	\$185 00
39	Peabody,	91,712 92	34 32	140	225 00
40	Gardner,	67,957 51	31 20	186	—
41	Clinton,	67,958 66	35 96	108	16 00
42	Milford,	65,000 00	30 04	205	—
43	Adams,	52,553 52	33 71	149	—
44	Frammingham,	73,095 08 ¹	28 54 ¹	231 ¹	—
45	Weymouth,	75,974 55	30 76	191	141 00
46	Watertown,	83,513 52	37 70	87	292 68
47	Southbridge,	35,376 60	33 37	156	—
48	Plymouth,	75,273 44	32 60	167	—
49	Webster,	42,170 59	45 20	45	—
50	Methuen,	64,909 20	26 23	264	65 00
51	Wakefield,	76,903 33	33 16	157	364 00
52	Arlington,	92,800 00	34 14	146	269 50
53	Greenfield,	76,749 95	35 70	117	—
54	Winthrop,	77,843 31	34 77	134	—
55	Amesbury,	33,592 92	40 23	64	—
56	Natick,	64,763 66	34 25	142	750 50
57	North Attleborough,	61,235 03	38 86	76	76 00
58	Danvers,	48,060 58	27 12	254	—
59	Winchester,	82,478 50	46 39	40	605 82
60	Dedham,	77,500 19	37 08	98	488 99
61	West Springfield,	70,145 76	31 48	182	—
62	Northbridge,	47,806 29	28 94	225	18 00
63	Ware,	40,911 88	30 42	196	351 50
64	Palmer,	46,447 75	28 32	232	440 25
65	Athol,	45,936 34	29 33	219	—
66	Easthampton,	45,000 00	34 94	127	—
67	Middleborough,	42,958 35	30 06	204	776 80
68	Braintree,	55,724 21	31 68	179	—
69	Saugus,	59,157 69	28 10	238	431 78
70	Norwood,	71,994 97	36 20	106	—
71	Milton,	92,584 75	64 16	10	—
72	Bridgewater,	37,151 95	34 21	143	400 00
73	Marblehead,	38,483 40	29 09	223	—
74	Andover,	36,854 50	37 23	95	241 00
75	Whitman,	44,865 65	33 01	161	—
76	Stoneham,	40,785 30	36 84	100	91 00
77	Rockland,	35,373 45	29 65	213	39 00
78	Montague,	39,000 00 ²	32 34 ²	171 ²	—
79	Hudson,	29,590 42	27 20	248	272 60
80	Spencer,	30,244 28	46 46	38	—

¹ Expenditures for 10 months only.

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914 — Con.				Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
From other sources.	FROM ALL SOURCES.				
	Amount.	Per pupil in average membership.	Rank.		
\$7,648 50	\$273,798 02	\$66 15	25	—	—
726 20	86,061 39	34 11	252	—	—
9,156 90	97,241 90	31 96	287	—	—
135 00	92,072 92	34 46	249	—	—
—	67,957 51	31 20	297	—	—
1,434 88	69,409 54	36 73	207	—	—
847 77	65,847 77	30 43	312	—	—
—	52,553 52	33 71	259	—	—
613 79 ¹	73,708 87 ¹	28 78 ¹	326 ¹	—	—
92 00	76,207 55	30 85	302	—	—
28 99	83,835 19	37 85	194	—	—
307 00	35,683 60	33 66	260	—	—
—	75,273 44	32 60	277	—	—
1,232 98	43,403 57	46 52	105	—	—
1,866 22	66,840 42	27 01	340	—	—
1,305 20	78,572 53	33 88	257	—	—
1,487 07	94,556 57	34 79	238	—	—
—	76,749 95	35 70	223	—	—
352 71	78,196 02	34 92	234	—	—
90 00	33,682 92	40 34	168	—	—
—	65,514 16	34 64	246	—	—
—	61,311 03	38 90	183	—	—
1,325 00	49,385 58	27 87	333	—	—
95 40	83,179 72	46 78	101	—	—
554 03	78,543 21	37 58	198	—	—
3,323 24	73,469 00	32 98	271	—	—
—	47,824 29	28 95	325	—	—
173 00	41,436 38	30 81	303	—	—
1,297 60	48,185 60	29 38	319	—	—
1,922 65	47,858 99	30 56	310	—	—
2,888 78	47,888 78	37 18	203	—	—
1,648 64	45,383 79	31 76	288	—	—
600 00	56,324 21	32 02	285	—	—
303 62	59,893 09	28 45	327	—	—
439 59	72,434 56	36 42	211	—	—
—	92,584 75	64 16	26	—	—
829 44	38,381 39	35 34	228	—	—
—	38,483 40	29 09	323	—	—
315 10	37,410 60	37 79	195	—	—
1,220 61	46,086 26	33 91	255	—	—
—	40,876 30	36 93	205	—	—
1,079 23	36,491 68	30 59	308	—	—
1,184 10 ²	40,184 10 ²	33 32 ²	266 ²	—	—
715 07	30,578 09	28 11	332	—	—
690 19	30,934 47	47 52	95	—	—

² Expenditures for 11 months only.

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
81	Concord, . .	6,421	\$9,211,855	\$7,682	87	\$17 30	220
82	Maynard, . .	6,390	4,132,045	3,759	293	18 40	181
83	Stoughton, . .	6,316	4,165,753	4,153	264	22 40	42
84	Swampscott, . .	6,204	14,039,344	11,072	38	16 80	241
85	Great Barrington, .	5,926	6,925,479	5,671	158	13 00	314
86	Reading, . .	5,818	7,518,955	5,464	171	19 20	148
87	Ipswich, . .	5,777	5,526,950	5,955	144	18 00	196
88	Grafton, . .	5,705	3,243,720	4,085	268	19 50	137
89	Winchendon, . .	5,678	4,343,633	4,078	269	22 40	43
90	Blackstone, . .	5,648	2,453,285	2,448	351	22 10	49
91	Franklin, . .	5,641	4,797,425	4,034	274	20 50	101
92	Belmont, . .	5,542	8,826,320	7,158	99	21 00	80
93	North Andover, . .	5,529	5,753,327	5,484	170	21 50	70
94	Abington, . .	5,455	3,649,620	3,735	296	22 80	32
95	Westborough, . .	5,446	3,333,626	4,796	211	20 90	91
96	Wellesley, . .	5,413	19,326,327	18,583	18	12 00	327
97	Orange, . .	5,282	4,014,250	4,641	221	22 00	57
98	Mansfield, . .	5,183	4,530,985	4,279	248	21 20	72
99	Easton, . .	5,139	7,117,979	6,591	118	13 15	312
100	Fairhaven, . .	5,122	4,226,832	4,160	261	20 50	100
101	Amherst, . .	5,112	5,731,635	5,755	152	18 50	173
102	Needham, . .	5,026	8,413,835	7,023	102	18 70	169
103	Chelmsford, . .	5,010	4,470,900	4,854	207	15 70	270
	Totals, . .	603,381	\$719,760,248	\$6,772	—	—	—

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily at- tendance.
\$5 50	87	148	714	179	—	1,322	214,529	1,134
7 48	293	290	728	120	137	1,187	188,154	1,046
6 24	142	— ¹	891	— ¹	—	1,081	163,036	938
3 68	302	275	751	172	—	1,333	214,000	1,201
5 23	207	255	799	142	113	1,328	205,714	1,128
5 51	189	210	789	212	—	1,414	193,944	1,257
5 23	208	186	620	164	—	951	172,300	918
7 80	43	154	608	170	41	855	139,772	753
6 30	135	192	772	154	29	1,155	180,733	967
9 29	11	218	777	128	—	1,149	168,684	941
8 64	22	218	776	186	75	1,245	203,626	1,152
4 85	237	236	825	196	13	1,295	233,181	1,156
6 35	132	222	696	148	19	1,117	181,974	992
9 70	8	220	580	90	5	1,040	172,182	944
7 13	78	102	411	134	—	725	117,510	663
2 95	332	189	566	144	13	1,102	168,899	983
7 70	47	176	551	153	—	922	145,806	815
7 20	74	216	657	179	—	1,100	178,411	938
5 29	203	187	660	169	14	1,147	189,243	1,022
4 33	275	273	763	202	28	1,100	182,246	977
4 88	232	165	591	171	6	1,069	172,613	917
5 05	219	270	752	214	27	1,222	203,597	1,144
7 66	48	178	686	196	5	999	158,411	874
\$5 12	—	22,340	77,777	18,618	3,544	113,783	18,696,764	100,187

¹ Census taken under old law.

BOARD OF EDUCATION.

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

	TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
		Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
81	Concord, . . .	190	1,199	3	—	44	1	22	451
82	Maynard, . . .	180	1,099	—	2	31	1	5	148
83	Stoughton, . . .	174	1,003	1	—	29	1	6	133
84	Swampscott, . .	178	1,268	3	4	40	1	12	249
85	Great Barrington, .	182	1,221	—	—	40	1	7	228
86	Reading, . . .	176	1,376	—	4	42	1	13	322
87	Ipswich, . . .	187	928	1	4	28	1	7	202
88	Grafton, . . .	185	794	—	2	26	1	5	118
89	Winchendon, . .	187	1,065	—	5	37	1	7	161
90	Blackstone, . . .	180	1,002	—	—	34	1	3	99
91	Franklin, . . .	177	1,189	1	2	38	1	9	225
92	Belmont, . . .	176	1,233	1	2	38	1	11	271
93	North Andover, .	184	1,049	—	3	35	1	6	94
94	Abington, . . .	187	977	1	2	29	1	9	232
95	Westborough, . .	177	695	1	1	20	1	7	154
96	Wellesley, . . .	171	1,040	2	2	40	1	11	233
97	Orange, . . .	178	865	—	3	30	1	8	193
98	Mansfield, . . .	191	1,059	1	2	32	1	7	154
99	Easton, . . .	187	1,080	2	2	38	1	12	291
100	Fairhaven, . . .	175	1,016	3	4	34	1	13	190
101	Amherst, . . .	188	996	—	4	27	1	6	237
102	Needham, . . .	178	1,198	—	2	40	1	8	180
103	Chelmsford, . . .	181	921	—	2	33	2	7	146
	Totals, . . .	187	106,279	155	180	3,344	68	742	18,147

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1914-15 — *Con.*

PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915 — *Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
78,482	193	424	\$25,424 06	\$59 96	\$16,444 10	\$38 78
23,680	185	133	8,129 21	61 12	5,494 25	41 31
21,951	184	126	6,769 88	53 73	4,344 50	34 48
42,161	177	250	14,631 44	58 73	10,955 25	43 82
37,718	191	203	8,546 84	42 10	6,302 50	31 05
46,799	176	284	16,595 82	58 44	10,869 25	38 27
34,930	187	191	7,400 00	38 74	4,400 00	23 04
20,202	192	109	8,107 94	74 38	4,149 99	38 07
29,647	191	167	8,628 84	51 67	6,521 56	39 05
14,552	181	86	2,927 42	34 04	2,451 75	28 51
37,387	185	217	9,944 32	45 83	6,161 50	28 39
52,925	176	258	14,887 54	57 70	11,503 50	44 59
16,186	189	90	6,559 88	72 89	5,000 00	55 56
40,677	189	222	13,065 24	58 85	9,402 50	42 35
26,707	190	146	8,370 56	57 33	5,555 00	38 05
36,160	176	220	16,959 01	77 09	12,555 00	57 07
34,210	192	182	8,542 47	46 94	6,367 25	34 98
23,795	192	137	8,615 27	62 89	6,210 00	45 33
52,716	191	289	16,573 14	57 35	9,291 00	32 15
38,840	191	182	22,189 89	121 92	12,582 00	69 13
40,222	196	224	9,530 09	42 55	6,073 46	27 11
29,542	184	165	12,141 77	73 59	8,805 25	53 37
24,827	189	139	7,812 50	56 21	5,492 45	42 75
3,041,539	187	16,958	\$995,460 44	\$58 70	\$703,623 01	\$41 49

BOARD OF EDUCATION.

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
81	Concord,	\$446 54	\$1,760 26	\$4,198 00	\$1,294 00
82	Maynard,	228 19	1,134 25	—	800 00
83	Stoughton,	400 00	600 00	2,857 50	25 00
84	Swampscott,	538 88	2,614 52	4,700 00	4,512 94
85	Great Barrington,	388 41	1,947 17	—	567 50
86	Reading,	151 00	804 65	2,810 00	1,796 00
87	Ipswich,	922 73	1,039 00	2,900 00	—
88	Grafton,	392 70	1,498 54	—	1,187 98
89	Winchendon,	106 46	1,808 56	5,364 50	—
90	Blackstone,	64 00	1,314 78	—	—
91	Franklin,	503 31	1,536 11	1,352 50	738 77
92	Belmont,	—	2,346 07	5,800 00	1,275 00
93	North Andover,	55 83	1,174 06	5,849 96	2,155 00
94	Abington,	300 00	1,225 00	1,700 00	1,250 00
95	Westborough,	94 65	813 85	1,200 00	420 00
96	Wellesley,	1,135 66	1,774 53	4,100 00	1,552 64
97	Orange,	176 57	1,784 41	3,893 75	850 00
98	Mansfield,	613 80	884 08	4,650 00	550 00
99	Easton,	117 37	2,170 20	2,750 00	556 20
100	Fairhaven,	146 50	1,657 58	4,800 00	1,870 00
101	Amherst,	1 27	1,732 51	1,758 46	1,447 31
102	Needham,	522 46	2,850 21	7,419 00	1,971 00
103	Chelmsford,	308 40	1,833 36	2,400 00	—
	Totals,	\$29,894 09	\$154,968 76	\$282,781 56	\$122,653 49

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER. — 1914-15 — *Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>					
Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruc- tion.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$30,895 73	\$1,388 99	\$2,973 34	\$3,211 51	\$2,802 25	\$1,373 73
23,486 96	872 95	1,143 74	1,872 00	2,280 75	1,431 44
15,018 00	900 30	1,557 97	1,885 90	1,569 13	449 19
27,025 25	1,507 75	1,479 92	3,550 00	2,952 35	1,010 75
23,656 97	1,052 03	837 90	2,835 58	1,896 98	786 85
23,817 39	1,666 81	2,489 00	2,906 75	3,010 68	1,149 55
16,358 06	1,287 37	1,343 91	1,984 50	1,626 84	443 64
13,688 99	347 26	552 03	2,039 64	2,086 75	258 72
17,175 68	1,052 21	990 20	3,717 27	2,892 16	544 73
16,848 55	355 50	354 97	1,253 50	2,538 35	252 17
20,889 18	1,820 32	1,754 48	3,782 75	2,941 36	931 59
26,319 63	1,033 59	1,592 25	3,499 96	2,607 21	802 04
17,248 31	1,136 08	1,379 72	2,761 85	2,808 64	800 04
22,654 05	861 41	1,138 59	2,702 30	1,891 53	1,468 90
12,710 57	823 65	1,030 60	1,200 00	2,797 29	437 40
34,817 56	1,413 51	2,062 77	5,162 00	2,768 70	1,246 29
13,226 05	725 25	1,461 55	2,081 21	1,618 38	358 78
15,854 50	1,124 17	1,640 41	2,246 00	2,060 89	346 18
21,734 96	1,205 64	1,765 95	2,236 16	1,500 91	552 56
21,950 50	598 58	1,511 32	5,091 00	2,092 36	4,286 46
14,860 20	896 26	996 88	1,814 28	1,908 84	548 47
25,553 65	1,519 27	1,285 72	3,793 67	4,104 28	411 95
17,825 50	1,016 12	1,403 13	2,632 95	1,932 28	268 11
\$2,162,544 52	\$105,514 98	\$142,213 55	\$274,141 33	\$219,863 86	\$66,322 83

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
81	Concord,	\$1,604 47	—	\$512 75
82	Maynard,	2,113 70	—	75 00
83	Stoughton,	1,520 03	—	175 00
84	Swampscott,	1,587 67	\$43 57	211 00
85	Great Barrington,	1,004 22	—	50 00
86	Reading,	1,128 22	—	200 00
87	Ipswich,	3,619 06	—	225 00
88	Grafton,	1,371 48	30 27	91 66
89	Winchendon,	939 63	—	82 80
90	Blackstone,	676 49	—	400 00
91	Franklin,	2,415 78	6 00	223 30
92	Belmont,	642 79	—	159 47
93	North Andover,	1,007 28	—	156 08
94	Abington,	875 60	—	—
95	Westborough,	564 83	—	100 00
96	Wellesley,	2,769 88	117 90	3 03
97	Orange,	695 55	—	92 00
98	Mansfield,	2,704 99	—	500 02
99	Easton,	1,212 59	37 87	262 50
100	Fairhaven,	2,260 29	—	110 00
101	Amberst,	2,999 71	—	50 00
102	Needham,	3,148 05	—	315 95
103	Chelmsford,	649 83	—	250 00
	Totals,	\$156,750 33	\$980 02	\$27,690 11

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$4,094 45	\$279 85	\$56,835 87	\$996 43	\$2,448 12	\$3,444 55
389 50	99 00	35,927 48	-	-	-
497 65	686 59	28,142 26	-	-	-
300 00	779 10	52,813 70	-	1,661 74	1,661 74
1,558 50	162 68	36,744 79	93 35	886 13	979 48
996 25	498 72	43,425 02	1,162 81	-	1,162 81
2,387 50	1,241 69	35,379 30	2,142 00	-	2,142 00
3,788 92	271 34	27,606 28	96 98	367 44	464 42
2,069 35	650 59	37,394 14	-	505 85	505 85
11 50	29 65	24,099 46	-	208 35	208 35
2,653 69	515 60	42,064 74	-	-	-
-	280 68	46,358 69	57,383 19	8,012 38	65,395 57
239 00	156 13	36,927 98	22,865 24	1,999 25	24,864 49
1,200 00	145 00	37,412 38	-	-	-
2,136 72	353 38	24,682 94	-	536 18	536 18
1,380 00	910 20	61,214 67	7,791 52	935 83	8,727 35
3,030 50	889 51	30,883 51	-	-	-
1,047 40	150 89	34,373 33	-	-	-
3,918 00	191 29	40,212 20	-	454 75	454 75
1,774 00	-	48,148 59	-	95 00	95 00
1,365 93	1,665 93	32,046 05	-	-	-
1,078 00	248 46	54,221 67	43,456 18	1,545 81	45,001 99
2,472 00	64 61	33,056 29	234 20	1,054 71	1,288 91
\$104,582 35	\$43,249 80	\$3,894,151 58	\$731,387 08	\$90,052 74	\$821,439 82

GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

	TOWNS.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING DEC. 31, 1914.				
		FROM LOCAL TAXATION.			From State.	
		Amount.	Per pupil in average membership.	Rank.		
81	Concord,	\$50,654 67	\$42 25	54	—	
82	Maynard,	30,926 95	28 14	236	—	
83	Stoughton,	26,000 00	25 92	267	\$241 00	
84	Swampscott,	51,680 14	40 76	62	—	
85	Great Barrington,	36,239 19	29 68	211	—	
86	Reading,	41,417 57	30 10	202	—	
87	Ipswich,	28,909 05	31 15	187	—	
88	Grafton,	25,297 89	31 86	177	937 50	
89	Winchendon,	27,373 95	25 70	270	242 00	
90	Blackstone,	22,799 63	22 75	307	2,071 68	
91	Franklin,	41,426 26	34 84	130	254 00	
92	Belmont,	42,786 15	34 70	135	—	
93	North Andover,	36,524 79	34 82	131	—	
94	Abington,	35,386 02	36 22	105	930 50	
95	Westborough,	23,769 66	34 20	145	229 35	
96	Wellesley,	56,955 26	54 77	19	—	
97	Orange,	30,916 33	35 74	115	—	
98	Mansfield,	32,613 20	30 80	190	58 50	
99	Easton,	37,634 41	34 85	128	140 50	
100	Fairhaven,	18,311 99	18 02	338	—	
101	Amherst,	27,973 07	28 09	239	406 00	
102	Needham,	50,888 13	42 48	53	46 50	
103	Chelmsford,	34,241 92	37 18	96	86 00	
	Totals,	\$3,688,550 94	\$34 71	—	\$12,184 95	

SCHOOL RETURNS.

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GROUP II. TOWNS. POPULATION 5,000 OR OVER.—1914-15—*Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914 — Con.				Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
From other sources.	FROM ALL SOURCES.				
	Amount.	Per pupil in average membership.	Rank.		
\$1,140 75	\$51,795 42	\$43 20	129	-	-
-	30,926 95	28 14	331	-	-
64 50	26,305 50	26 23	342	-	-
-	51,680 14	40 76	161	-	-
1,571 82	37,811 01	30 97	300	-	-
2,007 45	43,425 02	31 56	291	-	-
-	28,909 05	31 15	298	-	-
60 00	26,295 39	33 12	268	-	-
8,729 96	36,345 91	34 13	251	-	-
156 50	25,027 81	24 98	347	\$1,238 35	-
209 48	41,889 74	35 23	229	-	-
13 75	42,799 90	34 71	242	-	-
160 00	36,684 79	34 97	232	-	-
383 87	36,700 39	37 56	199	-	-
-	23,999 01	34 53	247	-	-
-	56,955 26	54 77	53	-	-
-	30,916 33	35 74	219	-	-
-	32,671 70	30 85	301	-	-
3,257 41	41,032 32	37 99	193	-	-
26,467 48	44,779 47	44 07	125	-	-
1,821 29	30,200 36	30 32	314	-	-
343 16	51,277 79	42 80	131	-	-
229 00	34,556 92	37 52	200	-	-
\$94,546 92	\$3,795,282 81	\$35 71	-	\$1,238 35	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15.

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
104	Hingham, . .	4,965	\$8,286,197	\$8,939	61	\$17 00	232
105	Ludlow, . .	4,948	5,465,918	6,000	140	16 00	261
106	Lexington, . .	4,918	9,012,626	8,767	64	21 00	83
107	South Hadley, . .	4,894	3,330,901	3,402	323	22 90	30
108	Walpole, . .	4,892	7,161,345	6,304	132	16 00	265
109	Canton, . .	4,797	6,789,898	10,366	47	16 80	240
110	Monson, . .	4,758	1,907,625	3,091	333	19 30	42
111	Millbury, . .	4,740	3,213,293	3,447	318	22 00	56
112	Barnstable, . .	4,676	8,759,620	10,453	46	15 40	280
113	Uxbridge, . .	4,671	4,021,370	4,255	252	19 50	139
114	Dartmouth, . .	4,378	5,298,675	5,993	142	19 60	131
115	Provincetown, . .	4,369	2,423,370	2,940	340	23 50	17
116	Randolph, . .	4,301	2,883,750	3,495	312	21 80	61
117	Dudley, . .	4,267	2,120,505	4,408	236	25 20	9
118	Rockport, . .	4,211	4,023,540	4,967	198	19 00	157
119	Warren, . .	4,188	2,562,028	4,053	272	17 70	211
120	Lee, . .	4,106	2,781,712	4,552	226	23 00	27
121	Wareham, . .	4,102	5,795,014	6,965	106	17 00	238
122	Foxborough, . .	3,863	2,734,175	4,285	247	18 30	183
123	Templeton, . .	3,756	1,974,746	2,837	343	22 20	48
124	Tewksbury, . .	3,750	1,692,115	5,304	180	19 00	158
125	Williamstown, . .	3,708	5,116,228	7,277	95	17 30	223
126	Dalton, . .	3,568	5,284,642	7,411	91	12 75	318
127	Hardwick, . .	3,524	2,906,135	6,331	129	17 50	217
128	Agawam, . .	3,501	2,913,387	4,271	250	18 70	166
129	Medfield, . .	3,466	2,555,304	8,841	63	11 70	331
130	Dracut, . .	3,461	2,531,647	3,772	289	25 90	5
131	East Bridgewater, . .	3,363	2,655,347	3,804	286	20 80	92
132	Oxford, . .	3,361	2,091,634	3,482	314	19 30	143
133	Leicester, . .	3,237	2,553,278	5,319	178	24 00	15
134	Falmouth, . .	3,144	16,554,745	23,751	10	10 40	338
135	Sutton, . .	3,078	1,459,941	3,705	298	22 50	39
136	North Brookfield, . .	3,075	2,000,428	5,421	174	15 60	271
137	Lenox, . .	3,060	9,114,387	13,623	30	16 00	259
138	Nantucket, . .	2,962	4,592,303	8,899	62	18 50	175
139	Barre, . .	2,957	2,724,100	5,628	162	17 00	229
140	Pepperell, . .	2,953	2,358,557	4,903	201	21 20	74
141	Westport, . .	2,928	2,385,750	4,849	208	18 00	204
142	Westford, . .	2,851	2,256,593	5,128	187	16 00	266
143	Holbrook, . .	2,816	1,700,733	3,064	334	20 70	94
144	Somerset, . .	2,798	1,796,655	2,940	341	18 30	184
145	Ayer, . .	2,797	2,320,136	5,011	195	18 20	186
146	Billerica, . .	2,789	5,529,935	9,701	51	14 00	294
147	Holliston, . .	2,711	2,034,952	4,376	238	22 00	52
148	Medway, . .	2,696	1,790,895	3,477	315	22 00	54

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15.

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily at- tendance.
\$4 39	271	182	565	164	—	1,001	165,572	869
5 72	177	234	752	146	373	977	152,677	862
5 40	200	197	647	156	—	1,108	179,409	981
8 39	29	189	679	151	—	1,036	165,851	911
6 26	139	204	702	149	25	1,248	203,470	1,049
4 41	269	196	769	133	—	713	111,544	616
10 07	6	134	556	129	—	666	99,529	571
7 29	67	195	709	160	7	954	159,911	891
4 14	286	174	521	114	—	882	139,630	785
5 82	169	173	649	138	56	1,041	154,390	882
6 54	114	232	797	173	2	933	137,501	819
7 16	77	210	545	115	25	864	146,722	788
6 23	143	163	553	118	—	866	138,645	782
8 28	33	192	615	121	37	532	79,487	452
4 97	227	159	568	147	—	870	142,278	795
7 51	51	131	558	130	72	670	106,328	597
6 72	104	81	373	111	—	673	101,493	560
4 84	238	188	474	64	—	898	132,291	754
6 90	95	119	399	113	—	665	107,648	603
9 00	14	179	545	109	8	734	116,754	651
7 21	73	100	251	62	—	357	55,401	283
5 67	181	85	488	124	—	737	116,565	667
5 45	196	147	502	117	1	806	126,739	695
7 30	65	112	462	79	159	481	79,789	441
7 07	84	171	638	95	15	756	113,236	629
3 10	325	45	166	65	—	309	49,279	268
9 23	13	129	559	125	—	750	115,514	608
7 31	63	128	473	96	11	723	111,914	661
8 40	28	136	466	141	—	644	104,016	568
8 83	16	116	471	72	—	529	110,555	456
2 19	343	127	473	98	—	755	114,356	646
7 35	60	76	421	69	—	451	66,924	375
6 77	101	87	305	82	—	406	62,838	351
3 77	296	103	410	89	—	736	119,415	609
3 49	309	94	321	68	2	573	87,907	475
6 88	96	134	363	79	95	535	82,111	461
7 53	50	96	318	86	—	521	83,748	453
6 78	100	124	392	102	—	537	78,266	461
7 31	64	88	303	51	69	495	70,383	402
7 42	55	114	359	73	—	589	92,877	529
7 97	39	42	454	92	—	661	93,744	552
5 25	206	101	294	91	6	499	81,176	438
3 12	322	126	411	100	—	589	104,252	564
8 40	27	66	340	66	16	513	82,970	433
6 14	150	90	339	71	6	574	83,101	479

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — Con.		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
		Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
104	Hingham, . . .	188	927	5	3	34	1	10	220
105	Ludlow, . . .	177	911	—	3	34	1	4	44
106	Lexington, . . .	183	1,028	1	2	32	1	11	233
107	South Hadley, . . .	182	979	5	3	27	1	7	167
108	Walpole, . . .	194	1,136	1	2	37	1	8	203
109	Canton, . . .	181	655	1	3	23	1	8	188
110	Monson, . . .	174	617	—	3	22	—	—	—
111	Millbury, . . .	179	932	5	3	28	1	6	128
112	Barnstable, . . .	178	838	—	2	31	2	6	138
113	Uxbridge, . . .	175	945	—	—	31	1	4	117
114	Dartmouth, . . .	168	884	—	—	33	3	6	75
115	Provincetown, . . .	186	824	—	—	26	1	4	107
116	Randolph, . . .	182	825	—	2	21	1	5	148
117	Dudley, . . .	175	481	—	2	20	1	2	21
118	Rockport, . . .	179	810	3	2	24	1	6	84
119	Warren, . . .	178	632	3	2	17	1	6	144
120	Lee, . . .	181	611	—	—	21	1	5	119
121	Wareham, . . .	175	832	—	2	27	1	5	106
122	Foxborough, . . .	178	638	—	2	21	1	5	97
123	Templeton, . . .	182	696	—	1	20	1	4	115
124	Tewksbury, . . .	195	319	—	2	9	—	—	—
125	Williamstown, . . .	175	703	1	3	29	1	7	156
126	Dalton, . . .	182	713	3	3	23	1	4	109
127	Hardwick, . . .	181	459	—	4	20	1	5	91
128	Agawam, . . .	180	682	—	2	20	—	—	—
129	Medfield, . . .	183	289	—	2	10	1	4	70
130	Dracut, . . .	190	671	—	2	21	—	—	—
131	East Bridgewater, . . .	169	698	—	1	23	1	5	109
132	Oxford, . . .	184	601	5	3	21	1	5	84
133	Leicester, . . .	178	480	—	2	22	1	4	85
134	Falmouth, . . .	177	697	2	4	27	1	6	132
135	Sutton, . . .	178	394	—	—	18	1	1	26
136	North Brookfield, . . .	179	369	—	2	14	1	5	92
137	Lenox, . . .	196	669	—	2	29	1	6	105
138	Nantucket, . . .	185	516	—	—	20	1	5	140
139	Barre, . . .	178	484	—	4	17	1	4	95
140	Pepperell, . . .	187	481	1	2	19	1	6	108
141	Westport, . . .	170	492	—	1	21	1	1	16
142	Westford, . . .	174	440	—	2	17	1	3	62
143	Holbrook, . . .	180	555	—	2	17	1	4	107
144	Somerset, . . .	168	611	1	2	18	1	4	59
145	Ayer, . . .	185	463	—	2	15	1	4	99
146	Billerica, . . .	186	570	—	4	21	1	5	92
147	Holliston, . . .	188	465	—	6	17	1	3	80
148	Medway, . . .	184	515	1	2	15	1	4	63

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915—*Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
36,720	188	204	\$12,883 94	\$63 16	\$8,600 00	\$42 16
7,627	183	42	5,253 28	125 08	3,095 00	73 69
38,256	183	217	16,121 62	74 29	12,315 50	56 75
26,674	188	149	7,617 79	51 13	4,787 24	32 13
34,143	196	185	9,551 05	51 63	5,993 89	32 40
30,818	182	179	9,740 20	54 41	6,554 50	36 62
—	—	—	—	—	—	—
22,736	196	119	7,243 39	60 87	4,236 88	35 60
22,156	198	132	13,348 50	101 12	5,573 00	42 22
18,956	194	109	5,786 23	53 08	3,200 00	29 36
11,789	187	68	5,582 44	82 09	3,368 43	49 54
18,295	197	99	4,095 76	41 37	2,947 50	29 77
24,546	190	141	5,830 96	41 35	3,699 86	26 24
3,122	188	17	3,891 19	228 89	1,745 50	102 68
14,100	188	77	4,861 22	63 13	3,490 00	45 32
25,574	196	138	6,764 51	49 02	4,838 50	35 06
19,735	189	105	6,271 33	59 73	4,700 00	44 76
17,145	197	97	8,568 32	88 33	4,400 00	45 36
16,544	188	92	5,617 65	61 06	4,075 00	44 29
18,903	190	103	6,649 93	64 56	4,055 00	39 37
—	—	—	—	—	—	—
26,864	184	150	9,125 27	60 84	5,900 00	39 33
18,940	195	104	5,839 54	56 15	3,654 37	35 14
15,446	189	86	8,833 75	102 72	4,380 00	50 93
—	—	—	—	—	—	—
11,657	185	67	4,038 24	60 27	3,222 26	48 09
—	—	—	—	—	—	—
18,879	188	103	5,956 00	57 83	3,660 00	35 53
15,200	190	82	4,689 39	57 19	3,182 98	38 82
14,020	189	75	5,921 01	78 95	3,350 00	44 67
23,291	197	125	12,861 16	102 89	5,536 08	44 29
4,752	198	24	2,012 02	83 83	1,300 00	54 17
16,139	191	86	6,261 30	72 81	3,800 00	44 19
18,580	196	102	9,973 79	97 78	5,701 01	55 89
23,801	187	136	4,179 36	30 73	1,800 00	13 23
14,639	188	82	5,962 10	72 71	3,550 00	43 29
17,295	187	100	4,937 29	49 37	2,721 08	27 21
2,873	191	16	1,419 07	88 69	700 00	43 75
8,595	197	56	4,958 90	88 55	2,650 00	47 32
16,950	189	95	4,541 73	47 81	3,030 00	31 89
9,520	193	54	4,680 00	86 67	2,365 00	43 80
18,281	194	97	4,766 06	49 13	3,350 00	34 54
16,685	197	88	5,240 69	59 55	3,400 00	38 64
14,147	193	78	3,391 84	43 49	2,480 00	31 79
10,159	193	56	2,808 86	50 16	1,760 00	31 43

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
104	Hingham,	\$75 00	\$2,147 79	\$5,952 20	\$1,400 00
105	Ludlow,	315 61	1,481 78	3,350 00	1,076 00
106	Lexington,	—	1,495 35	5,100 00	268 50
107	South Hadley,	158 24	1,620 59	3,319 08	1,344 00
108	Walpole,	794 85	2,276 10	5,300 00	1,942 12
109	Canton,	134 40	2,000 00	3,808 00	1,200 00
110	Monson,	61 04	1,257 47	—	822 00
111	Millbury,	150 00	1,231 50	3,911 25	907 75
112	Barnstable,	—	1,800 00	—	1,425 00
113	Uxbridge,	50 00	1,160 20	—	—
114	Dartmouth,	183 58	1,945 98	—	—
115	Provincetown,	150 00	1,115 16	—	—
116	Randolph,	325 32	738 79	3,400 24	267 00
117	Dudley,	111 84	955 90	—	1,064 00
118	Rockport,	63 61	1,469 96	2,150 00	462 03
119	Warren,	21 62	1,416 52	2,431 18	660 00
120	Lee,	350 00	504 00	1,600 00	—
121	Wareham,	485 04	1,144 03	1,400 00	950 00
122	Foxborough,	293 71	968 13	2,832 59	—
123	Templeton,	140 11	920 40	—	518 50
124	Tewksbury,	183 31	336 16	—	522 35
125	Williamstown,	184 93	1,288 50	3,001 00	1,127 80
126	Dalton,	473 58	1,818 97	2,508 30	2,387 25
127	Hardwick,	295 86	862 32	1,500 00	1,203 01
128	Agawam,	241 15	1,013 50	—	677 00
129	Medfield,	122 49	457 00	—	513 00
130	Dracut,	50 00	845 00	2,308 00	746 00
131	East Bridgewater,	110 21	986 74	2,280 85	300 00
132	Oxford,	320 42	839 98	3,252 00	769 05
133	Leicester,	129 65	800 00	—	726 40
134	Falmouth,	199 15	2,135 04	2,967 38	3,048 75
135	Sutton,	150 00	815 02	—	—
136	North Brookfield,	—	750 00	1,400 00	640 00
137	Lenox,	200 60	1,919 80	3,000 00	1,548 70
138	Nantucket,	171 58	1,463 32	1,000 00	—
139	Barre,	54 00	934 56	—	1,475 24
140	Pepperell,	209 67	972 67	1,449 20	836 00
141	Westport,	380 79	1,150 68	—	550 00
142	Westford,	—	933 04	3,164 00	525 00
143	Holbrook,	186 04	593 77	1,770 00	386 25
144	Somerset,	33 45	975 00	1,000 00	480 00
145	Ayer,	37 50	808 56	—	490 00
146	Billerica,	—	1,158 50	3,250 00	2,002 00
147	Holliston,	84 47	796 56	—	687 93
148	Medway,	36 60	770 00	—	321 90

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—
YEAR ENDING JUNE 30, 1915—*Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$17,797 00	\$1,378 50	\$1,661 50	\$3,623 47	\$1,677 05	\$135 53
17,538 70	570 23	1,004 31	2,455 85	2,821 54	509 41
23,680 82	475 14	1,040 85	3,584 11	2,496 40	659 20
13,360 94	1,046 84	1,342 22	2,195 85	1,923 25	422 48
19,449 86	1,089 61	1,858 81	3,670 67	2,561 98	712 74
14,197 24	757 73	1,144 70	3,369 06	1,437 28	309 81
9,405 15	640 15	546 94	708 44	927 43	256 91
9,721 13	901 23	1,125 78	1,523 13	2,120 26	1,283 38
19,358 70	1,400 00	710 19	2,368 56	3,444 17	472 72
15,305 60	1,604 80	406 24	1,784 26	2,304 82	504 28
18,272 95	576 38	1,208 22	2,444 00	1,502 03	182 32
11,817 96	1,458 77	—	1,066 00	1,531 20	—
9,794 94	747 65	590 40	1,515 20	1,407 98	201 77
11,241 10	660 99	579 50	1,351 85	967 78	101 85
10,073 00	675 93	570 09	1,316 55	1,347 25	176 13
8,720 90	484 45	638 20	1,515 58	1,130 16	136 81
10,519 50	585 81	298 38	1,201 97	1,135 51	801 22
13,519 00	849 30	1,225 60	2,274 02	2,425 47	373 22
9,660 53	468 57	887 08	1,587 80	1,364 42	121 23
10,107 05	919 65	769 49	940 70	1,239 44	198 08
4,369 00	307 57	403 12	1,165 80	811 03	213 55
13,934 90	813 00	671 88	1,950 25	2,189 81	278 55
12,229 52	1,527 76	1,375 20	2,058 96	1,018 38	766 30
10,644 20	429 38	864 05	1,803 00	1,364 69	260 79
10,524 32	538 34	463 19	1,477 25	2,141 18	215 17
6,191 01	262 43	450 32	706 75	490 12	146 03
7,654 90	684 00	618 88	2,105 00	1,442 27	285 45
9,931 35	525 19	426 32	1,357 55	2,980 80	84 93
7,188 98	983 15	561 74	1,298 30	1,685 38	221 83
11,380 10	774 40	559 18	2,492 00	2,128 90	359 45
16,300 12	735 74	2,010 98	2,980 58	2,035 15	1,020 76
7,528 00	308 77	328 74	926 90	991 11	336 84
6,617 80	455 83	421 89	657 00	415 66	725 66
16,045 17	654 19	865 65	3,596 85	2,607 45	940 32
8,775 00	566 00	257 29	723 03	1,456 35	243 95
9,860 17	385 54	853 78	1,380 67	1,714 36	274 38
9,095 04	415 68	921 98	1,397 34	1,756 62	246 82
8,655 50	385 94	489 19	991 20	852 84	193 82
5,758 00	486 79	230 50	1,314 16	1,476 22	1,124 31
7,376 63	417 12	789 09	1,008 50	766 94	126 54
8,196 50	272 42	542 76	1,091 29	732 00	154 36
8,596 00	357 87	363 29	896 25	1,110 92	103 78
9,515 00	806 05	1,206 00	1,399 00	1,552 16	439 53
8,641 58	524 09	456 83	998 16	816 63	158 25
6,950 50	910 06	467 32	587 90	932 64	165 72

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
104	Hingham,	\$2,120 87	—	\$200 00
105	Ludlow,	2,259 94	\$8 25	160 00
106	Lexington,	1,479 03	—	227 31
107	South Hadley,	358 51	—	135 00
108	Walpole,	576 65	8 00	185 00
109	Canton,	480 85	—	882 43
110	Monson,	1,014 41	—	88 00
111	Millbury,	675 58	—	203 50
112	Barnstable,	2,596 08	—	150 00
113	Uxbridge,	606 26	—	—
114	Dartmouth,	1,723 17	18 37	302 25
115	Provincetown,	1,544 83	—	78 00
116	Randolph,	828 91	—	3 00
117	Dudley,	1,704 06	18 00	203 35
118	Rockport,	1,444 55	—	76 25
119	Warren,	848 61	—	150 00
120	Lee,	977 70	—	75 00
121	Wareham,	2,117 49	—	175 30
122	Foxborough,	689 54	—	196 62
123	Templeton,	1,316 57	—	100 00
124	Tewksbury,	492 63	—	100 00
125	Williamstown,	3,795 78	—	206 50
126	Dalton,	2,746 89	—	208 60
127	Hardwick,	559 22	—	132 50
128	Agawam,	778 83	—	100 00
129	Medfield,	527 40	—	75 00
130	Dracut,	628 26	—	100 00
131	East Bridgewater,	500 05	—	75 00
132	Oxford,	573 70	96 25	100 00
133	Leicester,	844 23	—	150 00
134	Falmouth,	2,636 18	—	284 88
135	Sutton,	512 85	—	100 00
136	North Brookfield,	1,755 28	—	50 00
137	Lenox,	1,706 87	3 00	150 00
138	Nantucket,	425 51	—	108 75
139	Barre,	2,267 79	4 90	71 00
140	Pepperell,	540 06	—	103 00
141	Westport,	1,114 28	—	150 25
142	Westford,	828 71	—	100 00
143	Holbrook,	700 79	—	30 00
144	Somerset,	1,749 04	—	50 00
145	Ayer,	1,282 90	—	119 00
146	Billerica,	365 01	—	22 50
147	Holliston,	920 98	—	13 00
148	Medway,	512 25	—	37 50

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$1,645 00	\$1,941 13	\$41,755 04	-	\$365 87	\$365 87
3,125 77	664 02	37,341 41	-	822 80	822 80
5,024 00	549 21	46,079 92	-	-	-
2,639 40	472 02	30,338 42	\$2,194 18	297 26	2,491 44
3,533 00	82 90	44,042 29	1,849 40	2,802 69	4,652 09
-	-	-	-	-	-
828 75	294 64	30,844 89	23,562 69	1,451 37	25,014 06
448 20	4,909 21	21,085 35	-	112 57	112 57
1,970 09	242 88	25,967 46	-	2,918 69	2,918 69
6,534 19	-	40,259 61	-	-	-
720 00	608 24	25,054 70	-	-	-
-	-	-	-	-	-
5,638 25	1,444 92	35,442 42	11,203 55	1,073 09	12,276 64
-	-	18,761 92	-	-	-
675 00	8 17	20,504 37	-	-	-
1 00	1,487 18	20,448 40	421 94	124 45	546 39
-	342 35	20,167 70	-	-	-
-	-	-	-	-	-
3,493 28	53 00	21,700 31	-	232 57	232 57
1,696 62	518 80	20,264 51	-	-	-
2,624 00	556 95	30,119 42	7,726 02	96 75	7,822 77
1,343 95	275 51	20,689 68	120 85	373 14	493 99
2,064 65	133 20	19,367 84	-	-	-
-	-	-	-	-	-
1,568 30	3,549 74	14,022 56	-	606 10	606 10
620 00	423 87	30,486 77	1,296 99	272 58	1,569 57
778 00	439 91	30,337 62	751 04	379 64	1,130 68
3,230 52	260 97	23,410 51	-	828 79	828 79
1,783 65	3,680 50	23,634 08	-	633 26	633 26
-	-	-	-	-	-
232 84	97 93	10,272 32	-	305 64	305 64
561 50	4,276 63	22,335 89	-	-	-
1,091 00	199 39	20,849 38	171 70	351 45	523 15
1,446 50	446 75	19,784 03	17,211 79	2,065 47	19,277 26
1,959 93	2,289 05	24,593 29	60 80	-	60 80
-	-	-	-	-	-
4,665 69	1,169 38	42,189 78	1,723 29	1,338 13	3,061 42
432 00	270 68	12,700 91	370 00	66 82	436 82
1,762 12	-	15,651 24	-	259 50	259 50
713 50	116 98	34,069 08	63 22	509 94	573 16
255 00	378 00	15,823 78	11,701 66	154 93	11,856 59
-	-	-	-	-	-
1,594 19	823 33	21,693 91	-	-	-
1,576 00	241 31	19,761 39	-	-	-
1,726 70	243 75	16,884 94	-	218 00	218 00
2,695 10	-	18,635 83	-	-	-
20 46	54 79	14,226 92	253 73	152 36	406 09
-	-	-	-	-	-
625 00	7 00	15,908 82	8,982 44	120 67	9,103 11
50 00	15 98	14,232 05	-	-	-
2,075 00	346 29	24,137 04	-	2,518 16	2,518 16
1,713 00	239 83	16,051 31	165 50	272 50	438 00
1,375 00	-	13,067 39	-	106 22	106 22

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
104	Hingham,	\$36,414 84	\$39 28	74	—
105	Ludlow,	31,284 02	34 34	139	\$291 83
106	Lexington,	48,667 35	47 34	36	—
107	South Hadley,	27,957 05	28 56	230	1,056 13
108	Walpole,	44,800 38	39 44	72	—
109	Canton,	29,957 28	45 74	43	144 50
110	Monson,	19,218 64	31 15	188	2,747 89
111	Millbury,	23,436 65	25 15	275	750 00
112	Barnstable,	36,229 20	43 23	49	—
113	Uxbridge,	23,395 77	24 76	282	—
114	Dartmouth,	34,648 80	39 20	75	—
115	Provincetown,	17,368 53	21 08	327	1,712 89
116	Randolph,	17,962 45	21 77	316	740 00
117	Dudley,	17,550 74	36 49	104	1,748 03
118	Rockport,	19,981 90	24 67	283	—
119	Warren,	19,221 76	30 41	198	1,207 40
120	Lee,	18,679 61	30 57	194	600 00
121	Wareham,	28,067 28	33 73	148	—
122	Foxborough,	18,870 72	29 58	215	572 91
123	Templeton,	17,779 26	25 54	272	2,091 86
124	Tewksbury,	12,192 30	38 22	82	3,329 06
125	Williamstown,	28,994 61	41 24	59	108 00
126	Dalton,	28,778 25	40 37	63	17 00
127	Hardwick,	21,203 71	46 20	42	576 00
128	Agawam,	20,608 72	30 22	201	500 00
129	Medfield,	7,926 47	27 50	243	1,940 51
130	Dracut,	23,375 59	34 84	129	450 00
131	East Bridgewater,	19,418 55	27 82	241	882 50
132	Oxford,	17,561 21	29 22	221	1,773 00
133	Leicester,	22,546 79	46 97	37	625 00
134	Falmouth,	36,194 88	51 93	22	—
135	Sutton,	10,705 80	27 17	251	1,771 51
136	North Brookfield,	13,535 39	36 68	102	1,845 01
137	Lenox,	34,399 50	51 42	24	—
138	Nantucket,	16,049 85	31 10	189	—
139	Barre,	18,747 71	38 74	77	608 00
140	Pepperell,	17,761 39	36 93	99	1,572 51
141	Westport,	16,165 25	32 86	163	2,027 51
142	Westford,	16,499 58	37 50	89	1,769 61
143	Holbrook,	12,633 43	22 76	306	1,638 17
144	Somerset,	14,326 47	23 45	298	1,647 51
145	Ayer,	12,180 00	26 31	260	1,397 77
146	BillERICA,	17,262 64	30 29	200	500 00
147	Holliston,	17,107 17	36 79	101	1,876 36
148	Medway,	11,000 00	21 36	322	931 85

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914 — Con.				Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
From other sources.	FROM ALL SOURCES.				
	Amount.	Per pupil in average membership.	Rank.		
\$2,719 94	\$39,134 78	\$42 22	138	-	-
52 00	31,627 85	34 72	241	-	-
-	48,667 35	47 34	96	-	-
225 53	29,238 71	29 87	316	-	-
1,396 04	46,196 42	40 67	164	-	-
108 00	30,209 78	46 12	108	-	-
-	21,966 53	35 60	225	\$1,313 36	-
-	24,186 65	25 95	345	-	-
922 17	37,151 37	44 33	122	-	-
2,288 56	25,684 33	27 18	338	-	-
80 80	34,729 60	39 29	178	-	-
-	19,081 42	23 16	351	947 51	-
1,073 76	19,776 21	23 97	349	-	-
38 00	19,336 77	40 20	171	1,238 36	-
-	19,981 90	24 67	348	-	-
993 02	21,422 18	33 90	256	1,238 36	-
329 09	19,608 70	32 09	284	-	-
232 50	28,299 78	34 01	254	-	-
133 50	19,577 13	30 69	307	-	-
341 98	20,213 10	29 04	324	1,313 36	-
105 04	15,626 40	48 99	86	1,022 51	-
580 00	29,682 61	42 22	139	-	-
394 85	29,190 10	40 94	156	-	-
1,820 07	23,599 78	51 42	75	-	-
290 29	21,399 01	31 38	292	-	-
129 32	9,996 30	34 47	248	1,022 51	-
139 02	23,964 61	35 72	220	-	-
8 50	20,309 55	29 10	322	947 51	-
60 22	19,394 43	32 27	283	1,238 36	\$173 91
1,605 15	24,776 94	51 62	73	-	-
714 92	36,909 80	52 96	63	-	-
113 00	12,590 31	31 96	286	1,022 51	-
152 50	15,532 90	42 10	141	1,022 51	-
1,150 00	35,549 50	53 14	60	-	-
-	16,049 85	31 10	299	-	-
782 16	20,137 87	41 61	146	-	-
261 00	19,594 90	40 74	163	947 51	-
316 25	18,509 01	37 62	196	947 51	-
-	18,269 19	41 52	150	1,238 36	-
255 32	14,526 92	26 18	343	1,022 51	-
-	15,973 98	26 14	344	1,022 51	-
-	13,577 77	29 33	320	773 01	46 32
50 00	17,812 64	31 25	296	-	-
234 00	19,217 53	41 33	152	1,238 36	-
176 75	12,108 60	23 51	350	1,022 51	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000.— 1914-15 — *Con.*

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
149	Manchester, . .	2,673	\$16,785,220	\$33,978	5	\$11 20	333
150	Cohasset, . . .	2,585	10,195,041	20,806	17	14 00	299
151	Norton,	2,544	1,666,500	3,630	302	19 20	147
152	Scituate,	2,482	5,697,535	11,944	34	18 50	177
153	Bourne,	2,474	7,831,825	17,327	21	12 80	317
154	Lancaster, . . .	2,464	6,914,825	21,813	15	12 00	323
155	Hopkinton, . . .	2,452	1,889,140	4,653	220	20 50	103
156	Kingston,	2,445	1,682,480	3,527	310	21 60	65
157	Auburn,	2,420	1,730,000	2,803	344	15 40	279
158	Seekonk,	2,397	1,797,065	3,705	297	15 50	275
159	Wilbraham, . . .	2,332	1,415,869	6,349	127	11 00	336
160	Hanover,	2,326	2,131,850	5,700	156	15 20	283
161	Sharon,	2,310	3,711,953	9,469	53	17 70	210
162	Groveland, . . .	2,253	1,265,388	2,875	342	22 20	44
163	Dighton,	2,235	1,496,587	3,606	304	17 80	206
164	West Bridgewater, .	2,231	1,641,549	3,492	313	19 60	132
165	Deerfield,	2,209	2,599,582	6,355	126	16 20	252
166	Wayland,	2,206	3,014,601	8,998	59	16 70	244
167	Brookfield, . . .	2,204	1,407,002	3,985	278	24 00	12
168	Merrimac,	2,202	1,343,675	4,096	267	22 00	55
169	Hopedale,	2,188	6,705,900	15,103	25	12 00	322
170	Groton,	2,155	4,422,385	12,422	33	9 00	346
171	Douglas,	2,152	1,308,564	3,675	300	16 40	250
172	Holden,	2,147	1,857,782	4,156	262	20 80	93
173	Shirley,	2,139	1,310,096	5,928	145	17 20	226
174	Acton,	2,136	2,425,035	7,822	84	17 00	228
175	Williamsburg, . .	2,132	1,169,351	2,953	338	20 50	107
176	Harwich,	2,115	1,673,208	5,196	185	19 00	156
177	Ashburnham, . . .	2,107	1,277,095	4,300	245	25 00	10
178	Weston,	2,106	8,791,924	25,707	8	10 50	337
179	Hull,	2,103	8,871,443	34,790	4	16 70	243
180	Upton,	2,071	1,268,640	3,939	280	18 00	202
181	Belchertown, . . .	2,054	982,330	2,512	349	20 00	112
182	Charlton,	2,032	1,440,680	4,419	235	17 30	219
183	Avon,	2,013	1,116,002	2,565	348	20 60	98
184	Rehoboth,	2,001	1,043,218	2,946	339	17 30	222
185	Hadley,	1,999	2,043,212	4,356	241	20 50	102
186	Hatfield,	1,986	1,991,877	4,930	197	18 90	162
187	Swansea,	1,978	1,898,820	5,118	190	21 00	87
188	Georgetown, . . .	1,958	1,321,663	4,621	223	20 00	115
189	Sturbridge,	1,957	941,730	3,475	316	16 40	251
190	Shrewsbury, . . .	1,946	2,725,936	6,918	107	16 00	262
191	Stockbridge, . . .	1,933	4,979,170	16,010	24	17 10	227
192	Dennis,	1,919	1,372,485	5,439	172	19 50	136
193	Wilmington, . . .	1,858	1,980,716	3,993	277	17 60	212

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily at- tendance.
\$1 48	350	85	282	83	—	525	90,564	472
2 95	331	105	290	64	—	500	89,474	471
6 83	98	104	321	67	—	496	70,907	415
3 62	305	85	322	60	—	529	84,569	445
3 10	324	108	312	64	—	486	74,896	425
2 72	335	89	309	87	—	357	55,202	298
7 72	44	624	282	27	—	438	71,251	383
6 98	91	102	346	83	13	505	82,323	451
6 68	106	142	508	112	—	617	92,910	576
6 18	148	92	384	57	—	562	72,278	433
6 46	120	83	257	51	187	254	37,665	210
5 08	217	69	251	83	30	393	63,886	351
4 54	258	95	299	65	—	429	71,041	389
8 04	37	75	280	57	—	453	70,216	401
7 29	66	116	355	81	—	435	69,477	396
7 19	75	100	337	86	9	491	78,746	447
5 89	164	75	377	24	—	464	64,649	369
5 57	186	64	224	73	—	374	57,631	318
6 85	97	50	250	68	1	363	55,831	331
6 73	103	59	198	56	—	349	56,665	309
2 66	336	112	293	58	—	478	71,814	418
3 16	320	61	230	64	—	367	60,325	331
6 39	128	84	278	68	42	405	60,301	337
8 25	34	81	340	74	19	485	70,666	419
5 59	185	77	236	64	19	236	36,610	200
7 38	58	89	239	61	—	318	52,435	283
8 70	20	70	260	62	—	422	66,876	374
5 04	220	49	233	42	—	343	50,154	297
7 31	62	76	252	56	—	317	48,367	270
3 26	317	— ¹	246	— ¹	—	371	59,200	320
1 83	348	68	207	33	—	307	39,457	209
6 57	112	69	207	66	1	361	54,835	299
8 63	23	75	265	67	—	420	64,258	361
6 02	154	92	230	65	—	362	46,537	291
7 41	56	75	314	80	—	451	74,957	422
4 91	230	83	310	62	—	417	62,263	345
4 80	240	119	295	60	33	494	74,747	433
4 54	257	120	289	23	118	419	64,478	370
6 29	136	52	331	64	—	426	60,327	343
4 96	228	72	246	58	—	310	45,121	255
7 22	71	77	232	45	—	307	41,834	241
4 22	280	96	290	53	1	418	61,730	364
4 91	231	56	207	61	—	338	49,310	279
6 19	146	32	161	30	—	280	40,558	228
6 63	111	71	358	112	—	561	79,038	419

¹ Census taken under old law.

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — Con.	POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.			
	Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
149 Manchester, . .	193	494	3	3	19	1	6	109
150 Cohasset, . .	190	490	1	2	19	1	5	113
151 Norton, . .	175	459	—	2	15	1	3	54
152 Scituate, . .	190	477	—	2	15	1	4	96
153 Bourne, . .	184	452	3	2	18	1	5	60
154 Lancaster, . .	184	317	1	—	18	1	5	50
155 Hopkinton, . .	186	406	1	4	13	1	4	88
156 Kingston, . .	182	477	—	2	16	1	4	74
157 Auburn, . .	161	617	—	—	18	—	—	—
158 Seekonk, . .	167	485	—	2	15	—	—	—
159 Wilbraham, . .	179	223	—	2	12	—	—	—
160 Hanover, . .	182	374	—	—	12	1	3	74
161 Sharon, . .	182	392	—	2	15	1	5	83
162 Groveland, . .	175	440	—	2	15	1	4	94
163 Dighton, . .	176	415	—	2	13	—	—	—
164 West Bridgewater, . .	176	470	—	2	15	—	—	—
165 Deerfield, . .	175	409	2	2	14	—	—	—
166 Wayland, . .	180	335	2	2	14	1	5	63
167 Brookfield, . .	167	353	—	2	17	1	3	47
168 Merrimac, . .	183	328	—	1	13	1	4	77
169 Hopedale, . .	171	444	—	—	17	1	3	59
170 Groton, . .	182	356	—	2	15	1	5	85
171 Douglas, . .	179	356	—	—	14	1	2	28
172 Holden, . .	169	447	—	2	21	1	4	95
173 Shirley, . .	183	221	—	2	9	1	3	31
174 Acton, . .	185	310	—	2	11	—	—	—
175 Williamsburg, . .	179	396	2	3	17	1	3	63
176 Harwich, . .	169	322	—	1	13	1	2	51
177 Ashburnham, . .	179	297	2	—	11	—	—	—
178 Weston, . .	185	342	—	3	16	1	5	85
179 Hull, . .	175	255	—	3	9	—	—	—
180 Upton, . .	183	322	—	2	12	1	3	67
181 Belchertown, . .	178	391	—	—	19	1	3	50
182 Charlton, . .	160	326	—	2	15	1	2	25
183 Avon, . .	181	435	—	2	13	1	4	79
184 Rehoboth, . .	177	354	—	—	15	—	—	—
185 Hadley, . .	173	469	1	1	17	1	6	86
186 Hatfield, . .	174	404	—	3	15	—	—	—
187 Swansea, . .	176	371	3	2	14	—	—	—
188 Georgetown, . .	197	286	—	2	8	—	—	—
189 Sturbridge, . .	174	271	—	1	11	—	—	—
190 Shrewsbury, . .	169	394	—	2	15	1	3	50
191 Stockbridge, . .	176	311	—	2	17	1	4	71
192 Dennis, . .	178	244	—	1	13	1	3	60
193 Wilmington, . .	188	496	—	4	16	1	4	105

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915—*Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
19,897	197	105	\$9,227 56	\$87 88	\$6,050 00	\$57 62
19,611	190	106	9,193 21	86 73	5,549 99	52 36
8,501	184	50	3,417 22	68 34	2,410 69	48 21
15,833	190	89	5,192 35	58 34	3,700 00	41 57
9,905	193	55	5,758 36	104 70	3,704 00	67 35
8,418	187	47	4,838 22	102 94	3,882 00	82 60
15,908	200	83	5,011 66	60 38	2,750 00	33 13
12,959	190	72	3,651 28	50 71	2,720 00	37 78
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
12,054	185	68	3,350 00	49 26	2,350 00	34 56
12,164	189	71	5,970 91	84 10	4,251 50	59 88
16,241	187	90	3,946 39	43 85	2,735 00	30 39
-	-	-	-	-	-	-
-	-	-	-	-	-	-
10,423	190	58	6,392 00	110 21	3,658 85	63 08
7,794	186	45	3,428 30	76 18	2,300 00	51 11
12,546	185	74	4,306 19	58 19	2,650 00	35 81
9,651	188	54	5,595 00	103 61	3,500 00	64 81
13,586	182	78	5,520 61	70 78	3,943 50	50 56
4,381	196	24	1,727 75	71 99	1,468 87	61 20
15,451	184	88	4,157 86	47 25	2,992 01	34 00
5,580	196	31	2,912 06	93 94	2,075 83	66 96
-	-	-	-	-	-	-
11,255	196	60	3,061 03	51 02	1,936 00	32 27
9,345	196	50	2,508 12	50 16	1,530 00	30 60
-	-	-	-	-	-	-
14,245	185	80	8,502 09	106 28	6,305 69	78 82
-	-	-	-	-	-	-
11,196	197	59	3,248 80	55 06	1,800 00	30 51
8,385	195	47	3,455 95	73 53	2,411 00	51 30
3,741	187	21	1,928 06	91 81	1,678 00	79 90
14,060	188	75	3,285 58	43 81	2,670 00	35 60
-	-	-	-	-	-	-
14,749	188	84	4,765 11	56 73	3,262 68	38 84
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
8,434	193	45	3,522 33	78 27	2,600 00	57 78
10,333	177	63	7,290 29	115 72	4,035 00	64 05
8,183	190	48	2,681 01	55 85	2,200 00	45 83
16,138	185	92	6,313 02	68 61	3,720 00	40 43

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
149	Manchester,	\$128 50	\$1,000 08	\$3,000 00	\$1,775 00
150	Cohasset,	528 32	996 11	1,200 00	592 65
151	Norton,	144 41	554 60	—	450 00
152	Scituate,	250 00	633 33	—	615 00
153	Bourne,	324 83	1,051 39	3,456 11	—
154	Lancaster,	201 57	670 00	1,400 00	—
155	Hopkinton,	31 45	929 47	1,519 08	596 42
156	Kingston,	141 00	704 50	—	600 00
157	Auburn,	260 91	765 00	—	—
158	Seekonk,	100 00	600 00	—	372 96
159	Wilbraham,	136 24	582 33	—	424 65
160	Hanover,	130 00	569 93	—	—
161	Sharon,	120 73	385 00	3,400 00	440 00
162	Groveland,	159 17	735 41	—	550 00
163	Dighton,	—	691 45	—	425 00
164	West Bridgewater,	81 65	921 30	—	—
165	Deerfield,	113 22	800 59	1,067 00	432 29
166	Wayland,	142 52	831 62	2,308 85	900 00
167	Brookfield,	185 00	787 31	1,200 00	380 00
168	Merrimac,	5 55	624 43	1,100 00	200 00
169	Hopedale,	95 28	739 81	—	—
170	Groton,	90 21	1,048 61	—	930 47
171	Douglas,	84 77	695 04	—	—
172	Holden,	81 50	847 14	—	938 00
173	Shirley,	161 38	440 15	—	365 00
174	Acton,	88 22	632 92	—	—
175	Williamsburg,	225 00	750 00	1,548 75	484 86
176	Harwich,	195 04	888 11	—	309 96
177	Ashburnham,	56 65	666 60	1,008 00	—
178	Weston,	556 11	213 91	2,240 00	—
179	Hull,	215 00	534 00	2,300 00	798 00
180	Upton,	27 46	498 70	—	—
181	Belchertown,	—	1,500 00	—	—
182	Charlton,	237 96	800 00	—	212 00
183	Avon,	105 08	482 10	1,050 00	—
184	Rehoboth,	184 20	692 66	—	—
185	Hadley,	96 31	708 44	1,200 00	225 00
186	Hatfield,	96 63	797 29	—	433 00
187	Swansea,	177 13	922 65	—	325 00
188	Georgetown,	75 00	355 58	—	360 00
189	Sturbridge,	10 40	620 04	—	288 00
190	Shrewsbury,	190 00	543 24	—	614 00
191	Stockbridge,	113 72	1,893 26	—	1,118 00
192	Dennis,	111 25	841 57	—	432 00
193	Wilmington,	222 00	768 63	2,640 00	1,105 00

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—
YEAR ENDING JUNE 30, 1915—*Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$11,649 75	\$425 01	\$1,138 61	\$1,724 50	\$1,515 14	\$730 23
15,968 75	784 61	2,598 17	1,156 95	1,427 75	425 98
6,846 19	477 18	361 06	870 00	1,018 15	99 15
10,525 00	981 42	304 21	1,510 00	1,049 50	300 00
9,238 93	474 70	1,293 27	1,525 58	842 90	628 79
8,348 10	443 17	414 17	1,450 00	1,163 84	613 84
6,468 08	667 54	966 66	1,001 80	1,140 90	137 35
7,786 00	188 18	354 19	1,560 61	1,484 25	11 94
7,805 40	382 26	312 22	1,125 51	1,433 08	57 31
6,513 50	201 39	327 66	954 00	540 83	160 25
5,665 95	85 66	313 47	703 25	519 55	93 68
7,575 20	262 23	212 07	866 00	665 18	374 12
7,091 75	313 80	652 76	1,205 00	1,344 22	101 65
7,516 00	219 74	315 31	878 68	1,009 53	144 50
5,891 40	116 46	340 44	756 00	574 08	—
7,759 00	368 71	215 81	804 40	926 84	188 77
6,761 50	311 94	463 74	841 40	945 62	297 69
7,351 00	289 21	601 08	1,000 00	1,160 90	232 41
6,421 75	430 18	347 25	659 60	1,069 12	76 35
5,680 75	330 58	233 64	710 00	686 55	99 02
12,005 50	736 65	682 74	1,533 10	1,691 71	318 84
8,768 75	676 86	546 20	1,213 10	623 72	158 92
6,433 50	200 80	255 99	744 50	1,598 50	385 48
9,896 71	872 87	671 13	1,286 41	997 98	183 95
5,104 23	189 52	248 18	542 87	533 76	80 84
5,788 86	316 74	228 57	964 00	759 75	130 44
5,799 25	449 68	192 86	752 50	924 57	414 97
5,865 00	224 44	283 69	616 25	374 06	147 37
3,654 00	434 12	104 57	613 14	827 15	101 93
11,840 75	548 81	1,101 85	1,460 42	1,995 27	846 69
4,487 50	256 94	198 08	1,607 75	558 51	157 25
5,011 50	165 84	397 24	615 00	850 36	37 39
7,463 00	240 99	301 00	332 90	666 86	188 10
6,495 20	252 00	302 27	237 50	539 79	106 11
6,155 70	530 11	284 90	826 00	709 50	87 59
5,085 04	325 09	271 91	295 00	265 85	—
7,013 28	392 30	711 43	1,091 67	967 09	314 21
6,705 00	1,127 60	517 72	1,061 75	1,566 45	130 32
5,136 69	284 18	197 00	898 01	736 31	80 65
3,921 80	18 25	10 90	550 00	485 99	17 70
4,442 00	192 61	272 36	455 60	522 33	39 49
7,986 00	343 77	572 25	847 80	1,022 55	271 32
11,108 25	368 02	1,131 74	1,825 13	1,446 45	613 30
6,706 41	802 19	34 33	499 00	351 36	70 38
7,100 00	612 90	1,092 52	1,252 00	1,467 16	568 86

GROUP III. TOWNS. POPULATION LESS THAN 5,000.— 1914-15 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
149	Manchester,	\$2,024 49	—	\$66 00
150	Cohasset,	1,679 02	\$42 68	143 25
151	Norton,	599 56	—	—
152	Scituate,	1,417 59	—	75 00
153	Bourne,	2,171 80	—	125 00
154	Lancaster,	343 40	—	317 59
155	Hopkinton,	323 29	—	—
156	Kingston,	932 16	—	100 00
157	Auburn,	816 16	—	100 00
158	Seekonk,	416 13	—	95 00
159	Wilbraham,	123 66	—	101 10
160	Hanover,	953 38	—	87 75
161	Sharon,	354 39	—	70 00
162	Groveland,	617 75	—	100 00
163	Dighton,	353 17	—	100 00
164	West Bridgewater,	766 02	—	65 00
165	Deerfield,	446 40	—	52 50
166	Wayland,	1,463 34	—	50 00
167	Brookfield,	416 28	—	25 00
168	Merrimac,	1,860 58	—	50 00
169	Hopedale,	826 73	—	22 00
170	Groton,	761 00	—	50 00
171	Douglas,	194 35	—	53 00
172	Holden,	1,384 60	—	51 50
173	Shirley,	152 35	—	62 50
174	Acton,	414 06	—	18 27
175	Williamsburg,	1,316 64	—	—
176	Harwich,	628 25	—	40 00
177	Ashburnham,	1,181 49	—	—
178	Weston,	121 19	—	325 00
179	Hull,	998 71	—	200 00
180	Upton,	429 56	6 20	20 87
181	Belchertown,	933 39	—	30 00
182	Charlton,	398 75	—	32 00
183	Avon,	415 11	—	80 00
184	Rehoboth,	185 24	—	45 00
185	Hadley,	861 43	—	93 75
186	Hatfield,	840 31	—	100 00
187	Swansea,	415 40	—	50 00
188	Georgetown,	22 95	—	25 00
189	Sturbridge,	574 32	—	32 50
190	Shrewsbury,	490 93	—	100 00
191	Stockbridge,	525 12	—	74 16
192	Dennis,	402 00	—	118 10
193	Wilmington,	1,017 51	—	100 00

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION —YEAR ENDING JUNE 30, 1915— <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$1,250 00	\$70 91	\$26,498 22	\$1,811 44	\$80 00	\$1,891 44
4,431 50	613 29	32,589 03	190 00	323 44	513 44
1,122 50	—	12,542 80	1,462 72	—	1,462 72
3,829 25	—	21,490 30	—	—	—
2,715 76	360 08	24,209 14	11,376 68	704 37	12,081 05
2,034 04	197 00	17,596 72	1,261 14	—	1,261 14
1,485 30	159 30	15,426 64	—	26 50	26 50
555 00	38 72	14,456 55	2,087 00	—	2,087 00
413 09	2,833 71	16,304 65	1,705 00	677 01	2,382 01
70 00	3,078 04	13,429 76	5,930 06	569 90	6,499 96
952 21	3,417 00	13,118 75	—	—	—
916 50	85 59	12,697 95	—	—	—
1,874 50	326 40	17,680 20	—	279 75	279 75
—	175 50	12,421 59	925 00	130 04	1,055 04
832 00	2,059 58	12,139 58	—	52 20	52 20
1,410 00	256 73	13,764 23	136 66	84 60	221 26
3,429 80	306 72	16,270 41	8,537 74	—	8,537 74
2,934 00	114 58	19,379 51	2,379 99	52 75	2,432 74
150 00	—	12,147 84	—	—	—
762 50	284 67	12,628 27	—	—	—
240 00	204 47	19,096 83	32,312 30	1,098 94	33,411 24
1,426 00	480 46	16,774 30	18,004 74	387 64	18,392 38
691 75	47 50	11,385 18	—	—	—
335 50	6 05	17,553 34	1,128 29	—	1,128 29
1,758 70	—	9,639 48	—	—	—
3,846 73	6,040 00	19,228 56	—	—	—
790 00	—	13,649 08	2,873 35	226 36	3,099 71
962 77	45 00	10,579 94	—	—	—
548 40	2,044 70	11,240 75	—	—	—
5,621 78	227 46	27,099 24	11,829 40	49 01	11,878 41
3,390 75	1,012 05	16,714 54	—	—	—
1,429 25	35 49	9,524 86	—	30 95	30 95
826 00	—	12,482 24	—	—	—
749 25	585 53	10,948 36	—	—	—
159 00	76 40	10,961 49	—	—	—
793 28	794 28	8,937 55	—	—	—
1,326 00	181 80	15,182 71	1,750 00	—	1,750 00
205 82	33 91	13,615 80	46,662 30	2,279 05	48,941 35
1,153 10	3,669 34	14,045 46	—	—	—
1,373 00	—	7,216 17	—	—	—
2,022 25	711 00	10,182 90	—	—	—
922 45	264 56	14,168 87	—	—	—
2,158 75	798 02	23,173 92	535 92	268 87	804 79
—	—	10,368 59	—	144 40	144 40
409 00	26 00	18,381 58	35,186 60	56 00	35,242 60

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING DEC. 31, 1914.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
149	Manchester,	\$24,800 71	\$50 21	29	—
150	Cohasset,	30,089 67	61 41	12	\$13 00
151	Norton,	11,386 16	24 81	281	1,582 26
152	Scituate,	20,637 31	43 26	48	38 50
153	Bourne,	24,295 46	53 75	20	—
154	Lancaster,	18,857 86	59 49	14	—
155	Hopkinton,	14,584 72	35 92	109	2,501 51
156	Kingston,	11,748 75	24 63	285	1,937 52
157	Auburn,	11,556 07	18 73	336	1,938 35
158	Seekonk,	11,119 06	22 93	304	1,511 18
159	Wilbraham,	9,156 01	41 06	60	3,848 74
160	Hanover,	10,826 94	28 95	224	1,503 69
161	Sharon,	16,837 74	42 95	52	343 75
162	Groveland,	10,168 79	23 11	301	1,813 36
163	Dighton,	10,913 71	26 30	262	1,851 36
164	West Bridgewater,	11,797 19	25 10	276	1,467 22
165	Deerfield,	15,325 96	37 42	90	1,655 55
166	Wayland,	16,803 63	50 16	30	1,023 35
167	Brookfield,	9,647 82	27 33	246	1,767 51
168	Merrimac,	9,049 12	28 69	227	1,659 01
169	Hopedale,	17,858 76	40 22	65	—
170	Groton,	13,984 93	39 28	73	—
171	Douglas,	8,363 90	23 49	296	2,467 36
172	Holden,	15,321 39	34 28	141	1,938 36
173	Shirley,	7,320 93	33 13	158	1,738 01
174	Acton,	17,904 59	57 76	16	1,752 20
175	Williamsburg,	10,173 77	25 69	271	2,715 66
176	Harwich,	8,440 16	26 21	265	1,604 76
177	Ashburnham,	9,336 19	31 44	183	1,439 23
178	Weston,	28,653 17	83 78	3	—
179	Hull,	16,261 48	63 77	11	—
180	Upton,	8,338 16	25 90	268	1,569 51
181	Belchertown,	8,479 84	21 69	319	2,686 51
182	Charlton,	8,683 01	26 64	257	1,030 62
183	Avon,	8,266 69	19 00	334	2,146 68
184	Rehoboth,	5,122 14	14 47	348	3,048 46
185	Hadley,	9,817 38	20 93	330	2,313 36
186	Hatfield,	9,033 23	22 36	310	1,348 01
187	Swansea,	11,953 53	32 22	172	1,514 91
188	Georgetown,	6,550 00	22 90	305	2,100 19
189	Sturbridge,	6,796 44	25 08	278	2,143 11
190	Shrewsbury,	11,499 88	29 19	222	857 14
191	Stockbridge,	24,466 07	78 67	4	—
192	Dennis,	8,494 14	54 81	132	1,671 01
193	Wilmington,	13,132 62	26 48	258	2,307 36

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914 — Con.					
From other sources.	FROM ALL SOURCES.			Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
	Amount.	Per pupil in average membership.	Rank.		
—	\$24,800 71	\$50 21	83	—	—
—	30,102 67	61 43	33	—	—
\$56 92	13,025 34	28 38	328	\$1,022 51	—
—	20,675 81	43 35	128	—	—
236 50	24,531 96	54 27	55	—	—
15 50	18,873 36	59 54	42	—	—
266 13	17,352 36	42 74	132	1,022 51	—
412 50	14,098 77	29 56	317	1,313 36	—
—	13,494 42	21 87	353	1,313 35	—
587 04	13,217 28	27 25	337	1,022 51	—
114 00	13,118 75	58 83	46	1,313 36	\$664 31
132 50	12,463 13	33 32	265	1,022 51	—
561 13	17,742 62	45 26	116	—	—
107 70	12,089 85	27 48	335	1,313 36	60
—	12,765 07	30 76	305	1,313 36	—
19 00	13,283 41	28 26	330	1,022 51	317 10
—	16,981 51	41 52	149	947 51	—
48 50	17,875 48	53 36	56	—	—
154 50	11,569 83	32 78	274	1,022 51	—
227 85	10,935 98	33 34	264	1,022 51	—
76 50	17,935 26	40 40	166	—	—
—	13,984 93	39 28	179	—	—
56 00	10,887 26	30 58	309	1,313 36	—
398 25	17,658 00	39 50	177	1,313 36	—
286 40	9,345 34	42 29	137	848 01	—
—	19,656 79	63 41	29	1,238 35	1,428 80
1,050 43	13,939 86	35 20	230	1,313 36	—
59 00	10,103 92	31 38	294	1,022 51	—
5 00	10,780 42	36 30	212	1,022 51	—
—	28,653 17	83 78	11	—	—
—	16,261 48	63 77	27	—	—
—	9,907 67	30 77	304	1,022 51	—
335 58	11,501 93	29 42	318	1,172 51	—
303 78	10,017 41	30 73	306	1,313 35	5 77
499 50	10,912 87	25 09	346	1,313 35	—
—	8,170 60	23 08	352	1,022 51	—
3,300 50	15,431 24	32 90	273	1,313 36	—
361 74	10,742 98	26 59	341	848 01	—
—	13,468 44	36 30	213	848 01	—
28 50	8,678 69	30 35	313	1,022 51	—
—	8,939 55	32 99	270	1,463 36	—
—	12,357 02	31 36	280	—	—
563 04	25,029 11	80 48	14	—	—
90 00	10,255 15	42 03	142	1,022 51	—
62 50	15,502 48	31 26	295	1,313 36	—

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
194	Hanson, . . .	1,854	\$1,483,510	\$5,494	169	\$13 50	308
195	Sheffield, . . .	1,817	1,117,935	3,617	303	15 50	276
196	Townsend, . . .	1,761	1,419,974	4,862	204	17 00	237
197	Hamilton, . . .	1,749	6,165,015	16,707	22	10 00	341
198	Southborough, . . .	1,745	2,316,178	6,713	113	14 40	292
199	Rutland, . . .	1,743	917,325	4,680	218	20 00	123
200	Wrentham, . . .	1,743	1,550,846	6,058	136	22 80	33
201	Colrain, . . .	1,741	900,162	2,970	336	19 00	151
202	Marshfield, . . .	1,738	2,613,780	10,497	44	16 50	246
203	Raynham, . . .	1,725	913,030	3,445	320	13 00	315
204	Northborough, . . .	1,713	1,926,775	6,881	109	12 50	319
205	Bellingham, . . .	1,696	1,004,290	3,561	307	18 00	190
206	Acushnet, . . .	1,692	1,154,020	3,497	311	23 00	23
207	Duxbury, . . .	1,688	3,640,339	12,728	31	15 00	285
208	Sandwich, . . .	1,688	1,426,250	5,615	163	18 20	187
209	Ashland, . . .	1,682	1,459,065	4,192	257	23 00	24
210	Carver, . . .	1,663	2,096,180	9,934	50	16 75	242
211	Salisbury, . . .	1,658	1,475,405	5,567	166	21 60	67
212	Northfield, . . .	1,642	1,485,405	5,286	181	20 70	97
213	Essex, . . .	1,621	1,267,965	4,748	215	20 00	114
214	Buckland, . . .	1,573	1,985,428	8,594	67	14 00	297
215	Chatham, . . .	1,564	1,711,560	7,221	98	14 00	298
216	East Longmeadow, . . .	1,553	1,256,140	3,305	328	17 30	221
217	Cheshire, . . .	1,508	871,879	3,405	322	16 10	257
218	Shelburne, . . .	1,498	1,927,538	6,739	112	14 00	301
219	Newbury, . . .	1,482	1,589,230	7,357	92	10 00	342
220	Huntington, . . .	1,473	705,940	2,684	346	26 00	2
221	West Newbury, . . .	1,473	1,075,805	4,760	214	12 00	328
222	Freetown, . . .	1,471	1,070,580	3,691	299	19 00	155
223	Marion, . . .	1,460	5,875,340	26,951	7	10 40	339
224	Sherborn, . . .	1,428	2,393,436	10,830	40	9 80	343
225	Yarmouth, . . .	1,420	2,620,964	11,346	37	16 00	267
226	Norwell, . . .	1,410	1,176,620	4,669	219	18 00	199
227	Millis, . . .	1,399	1,395,435	5,001	196	21 20	113
228	Lunenburg, . . .	1,393	1,506,291	6,001	139	16 20	255
229	Plainville, . . .	1,385	1,042,912	4,438	234	22 70	35
230	Chester, . . .	1,377	843,038	2,791	345	25 00	11
231	Rowley, . . .	1,368	2,174,327	8,947	60	9 50	345
232	Sterling, . . .	1,359	1,270,940	5,574	165	14 70	287
233	Westminster, . . .	1,353	977,225	4,054	271	20 50	106
234	Pembroke, . . .	1,336	1,166,515	5,635	161	19 40	140
235	West Brookfield, . . .	1,327	995,414	3,581	306	20 50	159
236	West Stockbridge, . . .	1,271	583,860	3,766	291	19 00	161
237	West Boylston, . . .	1,270	994,305	4,041	273	14 50	291
238	Westwood, . . .	1,266	4,471,045	21,916	13	10 40	340

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily at- tendance.
\$4 94	229	50	197	63	-	301	43,966	238
6 72	105	39	211	41	-	338	52,233	284
6 44	123	43	186	46	1	325	45,076	256
2 37	341	72	234	64	-	390	61,101	346
5 74	173	62	204	46	-	373	57,136	325
6 50	119	46	134	30	-	212	30,277	180
7 23	69	42	172	47	-	280	41,958	237
7 22	70	57	216	26	-	314	48,735	285
3 76	298	44	168	45	-	270	40,402	234
6 50	118	70	213	50	-	285	47,409	257
4 87	234	43	194	35	-	290	45,439	262
7 01	89	79	263	61	-	325	43,109	254
8 35	30	110	332	62	2	367	54,268	308
3 21	319	46	209	30	-	312	49,556	266
5 83	168	38	170	50	-	284	41,046	236
7 11	79	62	218	36	-	361	62,049	333
3 39	312	39	169	39	1	253	35,917	197
3 98	291	85	220	33	-	273	43,592	250
5 18	211	57	184	39	-	307	45,888	262
5 10	216	52	162	35	3	275	43,868	254
3 49	308	56	208	32	-	244	40,001	221
4 48	263	45	157	48	-	258	39,571	223
5 67	180	75	297	70	-	425	60,404	338
7 39	57	65	195	45	-	264	42,702	245
4 67	251	36	150	32	-	279	50,140	271
4 02	290	64	147	37	-	217	35,576	193
10 53	4	36	175	61	-	280	42,187	244
8 75	19	44	154	32	-	235	35,916	207
6 36	130	47	199	31	-	317	44,341	269
1 48	351	51	159	23	1	242	38,143	206
2 96	330	32	155	47	-	264	37,504	209
5 12	215	42	157	34	-	250	38,129	217
6 41	126	45	167	43	-	261	40,692	236
5 63	183	55	195	54	3	293	46,834	259
4 68	250	66	167	43	-	262	41,236	240
8 61	24	52	158	66	-	254	30,374	215
7 48	52	49	202	50	-	346	43,825	282
3 27	316	61	188	48	-	259	39,552	221
6 43	124	44	139	45	2	241	39,262	212
6 19	147	49	160	50	1	261	39,241	224
6 28	137	34	148	30	-	219	36,691	193
8 99	15	30	144	44	-	183	28,472	159
7 84	42	42	139	36	-	166	26,844	146
10 35	5	55	169	20	20	270	41,448	235
3 12	323	47	159	39	-	213	35,919	193

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
		Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
194	Hanson, . . .	185	270	—	2	10	—	—	—
195	Sheffield, . . .	185	309	1	1	16	1	4	56
196	Townsend, . . .	176	292	—	2	11	1	3	68
197	Hamilton, . . .	177	369	—	1	15	1	5	73
198	Southborough, . .	175	345	—	4	13	1	4	65
199	Rutland, . . .	168	196	—	—	8	1	3	46
200	Wrentham, . . .	177	256	—	2	12	1	3	34
201	Colrain, . . .	171	303	—	—	16	—	—	—
202	Marshfield, . . .	173	249	—	1	9	1	2	53
203	Raynham, . . .	184	265	—	1	8	—	—	—
204	Northborough, . .	173	280	—	2	10	1	3	55
205	Bellingham, . . .	170	282	—	—	11	—	—	—
206	Acushnet, . . .	184	330	—	2	9	—	—	—
207	Duxbury, . . .	186	286	—	2	13	1	3	49
208	Sandwich, . . .	181	254	2	2	12	1	4	54
209	Ashland, . . .	186	348	3	2	12	1	5	71
210	Carver, . . .	182	211	—	—	11	1	2	27
211	Salisbury, . . .	175	265	—	1	9	—	—	—
212	Northfield, . . .	172	281	1	2	11	1	3	68
213	Essex, . . .	173	267	—	2	11	1	4	57
214	Buckland, . . .	181	231	—	1	10	—	—	—
215	Chatham, . . .	177	237	—	1	11	1	3	51
216	East Longmeadow, .	178	380	—	2	13	—	—	—
217	Cheshire, . . .	175	256	—	2	8	—	—	—
218	Shelburne, . . .	185	286	—	1	14	1	6	112
219	Newbury, . . .	184	216	—	1	8	—	—	—
220	Huntington, . . .	173	263	—	2	12	1	3	53
221	West Newbury, . .	174	226	—	2	9	1	3	32
222	Freetown, . . .	166	290	—	2	10	—	—	—
223	Marion, . . .	185	218	—	4	7	—	—	—
224	Sherborn, . . .	184	221	1	1	10	1	4	50
225	Yarmouth, . . .	177	231	—	3	11	1	3	50
226	Norwell, . . .	185	252	1	1	9	1	3	55
227	Millis, . . .	181	279	—	2	10	1	3	49
228	Lunenburg, . . .	172	251	—	2	11	1	3	41
229	Plainville, . . .	180	235	—	2	9	1	3	48
230	Chester, . . .	176	302	—	2	15	1	3	50
231	Rowley, . . .	179	243	—	1	9	—	—	—
232	Sterling, . . .	181	228	1	2	12	1	3	50
233	Westminster, . .	175	241	1	3	12	1	3	58
234	Pembroke, . . .	190	207	—	2	10	1	3	38
235	West Brookfield, .	180	163	—	2	7	—	—	—
236	West Stockbridge, .	184	155	—	1	8	—	—	—
237	West Boylston, . .	177	246	—	2	10	1	2	38
238	Westwood, . . .	186	204	—	1	9	—	—	—

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15 — *Con.*

 PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915 — *Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSE OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
-	-	-	-	-	-	-
8,345	190	48	\$2,493 01	\$51 94	\$1,700 00	\$35 42
11,718	195	65	2,682 00	41 26	2,225 00	34 23
12,346	190	69	5,845 34	84 72	3,586 25	51 97
10,543	185	59	5,022 24	85 12	3,160 00	53 56
7,713	198	41	2,410 64	58 80	1,947 00	47 49
5,519	187	31	3,768 56	121 57	2,400 00	77 42
-	-	-	-	-	-	-
8,860	194	49	2,938 61	59 97	1,800 00	36 73
-	-	-	-	-	-	-
9,135	190	50	3,978 43	79 57	2,705 00	54 10
-	-	-	-	-	-	-
7,973	193	44	2,861 29	65 03	2,301 00	52 30
8,888	192	49	3,938 15	80 37	2,500 00	51 02
13,116	200	68	4,528 92	66 60	3,050 00	44 85
5,167	198	25	2,948 80	117 95	1,399 38	55 98
-	-	-	-	-	-	-
11,223	188	63	3,680 71	58 42	2,100 00	33 33
10,319	190	56	3,159 42	56 42	2,280 51	40 72
-	-	-	-	-	-	-
8,377	195	46	3,634 82	79 02	2,250 00	48 91
-	-	-	-	-	-	-
19,008	192	104	6,609 34	63 55	4,660 00	44 80
-	-	-	-	-	-	-
8,734	189	50	2,825 14	56 50	1,806 45	36 13
5,553	187	31	2,906 15	93 75	2,000 00	64 52
-	-	-	-	-	-	-
7,740	196	46	3,061 30	66 55	2,154 33	46 83
7,785	190	44	5,303 14	120 53	2,550 00	57 95
8,653	189	48	3,653 08	76 11	2,000 00	41 67
8,700	191	48	3,265 58	68 03	2,035 00	42 40
6,961	193	39	2,635 16	67 57	2,200 00	56 41
7,159	191	41	3,287 37	80 18	2,412 00	58 83
4,026	196	46	2,731 75	59 39	1,799 25	39 11
-	-	-	-	-	-	-
9,504	198	46	2,762 75	60 06	2,084 25	45 31
9,886	190	56	2,798 31	49 97	1,960 50	35 01
6,302	191	35	4,403 86	125 82	2,083 00	59 51
-	-	-	-	-	-	-
6,478	187	36	3,453 52	95 93	2,280 50	63 35
-	-	-	-	-	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—YEAR ENDING JUNE 30, 1915.			
		School committee and busi- ness offices.	Superintendents' salaries and business offices.	Principals' salaries and ex- penses.	Supervisors' salaries and ex- penses.
194	Hanson,	\$176 55	\$575 84	\$570 00	\$342 00
195	Sheffield,	—	832 00	—	91 80
196	Townsend,	5 50	883 50	—	660 00
197	Hamilton,	119 14	742 41	3,396 50	238 50
198	Southborough,	351 17	579 73	—	1,425 00
199	Rutland,	53 00	427 81	—	—
200	Wrentham,	100 00	574 75	—	400 00
201	Colrain,	146 67	686 52	—	199 98
202	Marshfield,	304 30	644 03	1,975 00	199 98
203	Raynham,	120 00	532 17	—	237 50
204	Northborough,	124 97	548 21	—	403 96
205	Bellingham,	5 27	670 47	—	—
206	Acushnet,	—	430 20	1,279 51	136 76
207	Duxbury,	156 50	645 02	2,320 50	22 10
208	Sandwich,	35 00	984 33	1,925 00	400 00
209	Ashland,	81 18	647 95	2,250 00	601 89
210	Carver,	136 02	650 98	—	—
211	Salisbury,	148 00	341 31	—	162 00
212	Northfield,	—	706 00	1,200 00	415 00
213	Essex,	152 26	588 71	1,000 00	195 00
214	Buckland,	94 66	534 33	—	417 64
215	Chatham,	240 80	660 13	—	232 47
216	East Longmeadow,	197 40	608 09	—	415 99
217	Cheshire,	61 35	299 47	—	250 00
218	Shelburne,	188 15	549 58	—	504 76
219	Newbury,	147 23	349 76	—	100 00
220	Huntington,	75 00	525 00	—	482 00
221	West Newbury,	—	425 00	1,700 00	371 00
222	Freetown,	165 71	731 05	—	500 00
223	Marion,	213 50	699 39	—	1,014 00
224	Sherborn,	182 91	322 26	1,650 57	25 00
225	Yarmouth,	223 51	684 14	—	1,775 06
226	Norwell,	75 00	566 67	950 00	75 00
227	Millis,	96 95	460 51	—	336 00
228	Lunenburg,	108 70	530 00	—	375 25
229	Plainville,	138 98	374 62	1,800 00	375 01
230	Chester,	45 00	888 91	—	410 00
231	Rowley,	66 67	366 19	—	47 50
232	Sterling,	69 01	680 52	1,097 50	460 63
233	Westminster,	85 01	652 68	900 00	241 00
234	Pembroke,	114 49	580 50	—	700 00
235	West Brookfield,	61 65	538 94	—	405 26
236	West Stockbridge,	10 00	596 00	—	—
237	West Boylston,	164 10	607 55	—	501 00
238	Westwood,	216 00	450 00	—	210 00

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—
YEAR ENDING JUNE 30, 1915—*Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$4,066 00	\$164 99	\$138 73	\$437 84	\$318 91	\$31 65
6,507 14	182 79	476 93	442 41	846 05	100 76
5,996 65	331 75	275 83	582 20	521 50	203 92
5,932 15	506 30	671 91	891 12	863 98	790 87
7,539 65	301 85	509 62	1,389 54	1,050 46	281 65
3,778 30	126 90	145 58	336 50	417 38	6 08
6,971 84	409 47	234 56	874 00	1,025 61	129 37
5,536 12	123 36	223 59	306 15	254 66	75 55
2,962 00	486 69	72 01	393 57	315 58	103 64
3,828 00	100 99	235 64	318 05	257 88	54 90
6,485 15	207 62	325 63	581 00	611 18	115 81
4,729 50	136 27	166 73	738 00	742 06	50 30
2,959 75	168 77	248 11	626 25	503 65	231 02
5,030 50	252 94	408 66	842 20	535 47	222 10
4,920 00	333 37	489 33	536 20	561 30	193 15
4,328 50	617 13	752 15	599 94	948 50	241 75
5,380 38	246 21	221 93	403 79	229 25	34 99
3,745 50	293 79	94 39	405 90	211 52	—
4,718 00	247 94	359 01	623 37	770 75	19 58
4,380 51	147 44	375 17	446 35	512 74	10 00
4,560 00	194 64	220 70	324 67	847 07	98 31
5,578 75	197 06	313 94	695 50	322 36	62 58
5,632 97	128 63	289 16	606 60	630 41	79 39
3,613 00	248 05	257 67	484 10	292 35	121 33
8,154 27	467 22	435 94	864 89	766 50	337 43
4,120 80	159 63	88 35	969 07	685 13	69 99
5,250 30	171 87	131 55	511 00	702 41	582 51
3,208 00	280 55	235 13	800 00	776 00	194 50
4,161 37	230 00	311 16	338 25	438 13	—
4,055 00	178 12	320 80	662 73	759 76	109 60
3,932 03	309 84	286 79	829 65	114 63	16 81
7,155 00	562 04	531 50	569 13	616 70	—
4,286 00	150 21	254 61	491 00	356 67	46 13
5,176 00	255 65	294 72	704 50	720 61	48 14
5,697 13	—	1,183 26	423 85	456 48	41 16
3,625 78	319 81	505 38	702 00	1,340 52	230 15
7,157 00	140 69	258 03	522 00	587 27	—
4,055 00	43 27	134 34	314 05	384 45	26 94
4,989 25	339 86	138 37	199 50	286 25	72 78
4,532 00	410 48	235 06	495 00	247 25	113 89
5,652 60	367 61	140 88	373 20	321 24	211 52
3,090 00	121 44	59 29	382 90	289 18	53 42
3,741 04	76 04	421 55	202 15	268 52	77 10
6,072 00	175 74	442 56	804 40	657 81	120 91
5,533 00	113 07	354 51	875 04	685 27	119 66

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING JUNE 30, 1915— <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
194	Hanson,	\$443 62	—	\$75 00
195	Sheffield,	383 06	—	40 00
196	Townsend,	242 90	—	50 00
197	Hamilton,	873 23	—	112 69
198	Southborough,	306 61	—	—
199	Rutland,	127 16	—	—
200	Wrentham,	420 19	—	27 00
201	Colrain,	207 63	—	50 00
202	Marshfield,	42 65	—	60 00
203	Raynham,	171 77	—	37 00
204	Northborough,	561 33	—	92 57
205	Bellingham,	422 07	—	31 00
206	Acushnet,	439 02	—	150 00
207	Duxbury,	709 20	—	125 00
208	Sandwich,	136 40	—	49 75
209	Ashland,	134 44	—	48 00
210	Carver,	339 92	—	52 50
211	Salisbury,	403 93	—	10 00
212	Northfield,	727 64	—	—
213	Essex,	267 13	—	30 00
214	Buckland,	134 22	—	50 00
215	Chatham,	711 05	—	50 00
216	East Longmeadow,	392 98	—	—
217	Cheshire,	239 26	—	50 00
218	Shelburne,	460 53	—	50 00
219	Newbury,	150 36	—	2 00
220	Huntington,	508 05	—	25 00
221	West Newbury,	678 02	\$28 02	55 50
222	Freetown,	843 50	—	50 00
223	Marion,	388 54	—	74 80
224	Sherborn,	58 04	—	—
225	Yarmouth,	67 39	—	69 25
226	Norwell,	499 82	—	47 50
227	Millis,	212 91	—	50 00
228	Lunenburg,	229 72	—	54 25
229	Plainville,	104 63	—	25 00
230	Chester,	92 85	—	50 00
231	Rowley,	618 29	—	5 00
232	Sterling,	421 47	—	50 00
233	Westminster,	123 52	—	50 00
234	Pembroke,	481 70	—	53 00
235	West Brookfield,	170 03	—	50 00
236	West Stockbridge,	1,816 15	—	—
237	West Boylston,	657 62	—	127 50
238	Westwood,	286 32	—	100 00

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915— <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$642 33	\$1,119 25	\$9,102 71	-	-	-
-	-	9,902 94	-	-	-
1,941 88	122 60	11,818 23	\$649 54	-	\$649 54
332 00	36 75	15,507 55	-	\$117 45	117 45
2,077 12	134 65	15,947 05	-	78 03	78 03
1,817 55	12 39	7,248 65	-	-	-
1,641 37	-	12,808 16	75 00	-	75 00
1,437 33	1,915 48	11,163 04	1,198 91	-	1,198 91
3,320 00	85 87	10,965 32	2,419 15	-	2,419 15
1,054 80	2,265 10	9,213 80	-	-	-
1,965 95	126 31	12,149 69	-	-	-
1,954 50	1,159 73	10,805 90	-	40 50	40 50
3,084 70	1,959 37	12,217 11	-	-	-
1,363 85	77 34	12,711 38	-	-	-
140 00	78 95	10,782 78	-	-	-
1,274 00	277 55	12,802 98	869 71	37 00	906 71
1,430 79	-	9,126 76	-	-	-
725 00	1,274 97	7,816 31	-	-	-
910 18	61 84	10,789 31	-	-	-
483 97	219 01	8,808 29	-	-	-
1,004 75	1,788 72	10,269 71	69 63	179 55	249 18
332 63	130 70	9,527 97	-	46 11	46 11
577 75	4,480 00	14,039 37	1,000 00	285 95	1,285 95
1,573 00	1,388 00	8,877 58	-	73 30	73 30
1,231 75	312 66	14,323 68	-	108 50	108 50
1,326 50	600 70	8,769 52	-	-	-
869 85	-	9,834 54	-	-	-
1,474 50	18 25	10,244 47	-	354 50	354 50
611 65	1,081 10	9,461 92	-	-	-
1,444 88	727 37	10,648 49	21,688 61	630 55	22,319 16
2,515 04	-	10,243 57	-	236 50	236 50
2,272 75	-	14,526 47	797 19	1,278 38	2,075 57
2,410 00	-	10,208 61	-	15 00	15 00
1,023 90	4 00	9,383 89	-	350 59	350 59
712 10	7 50	9,819 40	174 00	-	174 00
1,178 00	124 51	10,844 39	-	-	-
8 64	293 67	10,454 06	1,981 26	-	1,981 26
979 50	2,195 25	9,236 45	-	45 80	45 80
875 63	15 00	9,695 77	-	-	-
1,065 95	246 38	9,398 22	-	-	-
1,806 00	301 73	11,109 47	-	-	-
1,394 90	1,546 85	8,163 86	-	-	-
1,318 57	1,658 00	10,185 12	-	-	-
2,428 50	140 91	12,900 60	-	-	-
2,124 50	2,066 90	13,134 27	188 23	51 90	240 13

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING DEC. 31, 1914.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
194	Hanson,	\$7,324 12	\$27 13	253	\$1,456 67
195	Sheffield,	7,510 05	24 30	289	2,463 36
196	Townsend,	9,153 02	31 35	185	1,824 55
197	Hamilton,	14,611 55	39 60	69	—
198	Southborough,	13,313 01	38 59	78	2,388 81
199	Rutland,	5,959 30	30 41	197	1,985 01
200	Wrentham,	11,210 12	43 79	47	1,748 59
201	Colrain,	6,495 97	21 44	321	4,308 77
202	Marshfield,	9,830 87	39 48	71	416 66
203	Raynham,	5,933 31	22 39	309	4,996 96
204	Northborough,	9,374 39	33 48	153	2,191 50
205	Bellingham,	7,043 80	24 98	279	1,502 69
206	Acushnet,	8,385 98	25 41	273	2,859 36
207	Duxbury,	11,676 05	40 83	61	520 66
208	Sandwich,	8,309 77	32 72	165	2,022 51
209	Ashland,	10,373 73	29 81	210	2,320 66
210	Carver,	7,097 10	33 64	151	1,585 56
211	Salisbury,	5,875 00	22 17	312	1,287 01
212	Northfield,	7,699 03	27 40	244	1,848 01
213	Essex,	6,469 07	24 23	291	1,953 26
214	Buckland,	6,947 62	30 08	203	2,649 63
215	Chatham,	7,619 61	32 15	174	1,386 15
216	East Longmeadow,	7,126 53	18 75	335	6,316 75
217	Cheshire,	6,440 86	25 16	274	2,510 50
218	Shelburne,	9,006 99	31 49	181	2,148 83
219	Newbury,	6,388 22	29 58	216	1,853 11
220	Huntington,	7,433 09	28 26	233	2,459 52
221	West Newbury,	9,410 57	41 64	56	1,594 50
222	Freetown,	6,808 68	23 48	297	2,583 08
223	Marion,	8,700 10	39 91	66	93 00
224	Sherborn,	7,072 83	32 00	175	317 00
225	Yarmouth,	13,425 00	58 12	15	672 89
226	Norwell,	7,538 59	29 92	206	2,735 19
227	Millis,	7,856 66	28 16	235	1,835 01
228	Lunenburg,	7,055 82	28 11	237	1,930 51
229	Plainville,	8,979 36	38 21	83	1,786 18
230	Chester,	6,307 23	20 88	331	2,959 46
231	Rowley,	7,105 03	29 24	220	2,212 39
232	Sterling,	8,179 22	35 87	111	2,047 01
233	Westminster,	6,050 00	25 10	277	2,283 51
234	Pembroke,	7,323 84	35 38	121	2,453 43
235	West Brookfield,	5,246 25	32 19	173	3,157 30
236	West Stockbridge,	4,581 15	29 56	217	3,689 89
237	West Boylston,	10,289 25	41 83	55	2,338 36
238	Westwood,	13,972 46	68 49	6	—

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING DEC. 31, 1914— <i>Con.</i>					
From other sources.	FROM ALL SOURCES.			Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massachusetts school fund income on Dec. 31, 1914.
	Amount.	Per pupil in average membership.	Rank.		
-	\$8,780 79	\$32 52	278	\$1,022 51	-
-	9,973 41	32 28	281	1,313 36	-
\$610 03	11,587 60	39 68	176	1,313 36	\$206 56
56 80	14,668 35	39 75	175	-	-
-	15,701 82	45 51	113	1,238 36	-
-	7,944 31	40 53	165	1,172 51	-
59 57	13,018 28	50 85	79	1,022 51	-
48 00	10,852 74	35 82	217	1,463 36	-
-	10,247 53	41 20	154	-	-
55 50	10,985 77	41 46	151	1,463 36	-
192 50	11,758 39	41 99	143	1,313 36	-
4 00	8,550 49	30 32	315	1,463 35	28 62
-	11,245 34	34 08	253	1,022 51	-
24	12,196 95	42 65	135	-	-
18 00	10,350 28	40 75	162	1,022 51	-
-	12,694 39	36 48	210	1,022 51	-
529 00	9,211 66	43 66	126	848 01	-
1 13	7,163 14	27 03	339	848 01	-
240 48	9,787 52	34 83	237	848 01	-
15 25	8,437 58	31 60	290	1,022 51	-
-	9,597 25	41 55	147	848 01	-
-	9,005 76	38 00	192	1,022 51	-
29 52	13,472 80	35 46	227	1,172 51	-
-	8,951 36	34 97	231	1,463 36	-
500 00	11,655 82	40 76	160	1,022 51	8 24
37 79	8,279 12	38 33	189	1,313 36	-
378 00	10,270 61	39 05	181	1,463 36	-
-	11,005 07	48 70	87	1,313 36	683 36
-	9,391 76	32 39	279	1,313 36	4 62
-	8,793 10	40 34	169	-	-
579 50	7,969 33	36 06	215	947 51	-
524 17	14,622 06	63 30	30	-	-
-	10,273 78	40 77	159	1,313 36	-
38 00	9,729 67	34 87	236	1,022 51	-
-	8,986 33	35 80	218	1,022 51	-
78 85	10,844 39	46 15	107	1,022 51	417 07
718 50	9,985 19	33 06	269	1,463 36	-
57 07	9,374 49	38 58	185	947 51	-
107 08	10,333 31	45 32	115	1,022 51	-
42 92	8,376 43	34 76	240	1,172 51	-
99 00	9,876 27	47 71	91	1,313 36	-
54 00	8,457 55	51 89	72	998 01	-
-	8,271 04	53 36	57	1,463 36	-
43 65	12,671 26	51 51	74	1,463 36	-
180 00	14,152 46	69 37	23	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
239	Mattapoisett, . .	1,233	\$1,895,563	\$7,898	83	\$17 00	234
240	Bedford, . . .	1,231	1,858,977	12,646	32	19 50	135
241	Conway, . . .	1,230	812,002	4,185	259	18 00	193
242	Littleton, . . .	1,229	1,232,579	5,732	154	18 70	168
243	Clarksburg, . .	1,207	298,373	1,876	353	23 00	25
244	Tisbury, . . .	1,196	2,018,955	8,628	66	13 00	316
245	Edgartown, . .	1,191	1,380,610	7,116	100	20 00	113
246	Nahant, . . .	1,184	8,686,200	39,108	3	12 00	325
247	Lincoln, . . .	1,175	4,010,061	23,314	11	12 00	324
248	Topsfield, . .	1,174	4,070,501	25,440	9	8 00	348
249	Erving, . . .	1,148	1,076,742	4,486	231	13 50	307
250	Lakeville, . .	1,141	1,284,000	6,484	123	13 20	311
251	Middleton, . .	1,129	929,322	6,883	108	9 50	344
252	New Marlborough, .	1,124	873,775	4,458	232	22 50	38
253	Sudbury, . . .	1,120	1,498,570	7,538	89	18 50	178
254	Hinsdale, . . .	1,116	746,603	3,318	327	19 75	130
255	Stow, . . .	1,115	1,156,688	5,430	173	17 00	236
256	Rochester, . .	1,090	1,039,953	5,531	167	12 00	326
257	Longmeadow, . .	1,084	3,298,570	17,639	20	13 50	309
258	Oak Bluffs, . .	1,084	1,947,500	9,689	52	20 00	121
259	Orleans, . . .	1,077	3,835,589	22,300	12	3 00	353
260	Hubbardston, . .	1,073	757,225	4,351	243	25 50	7
261	North Reading, . .	1,059	982,734	6,340	128	21 00	85
262	Sunderland, . .	1,047	682,279	3,648	301	16 00	264
263	Harvard, . . .	1,034	1,808,606	16,148	23	11 40	332
264	Wellfleet, . . .	1,022 ^a	842,310	5,730	155	20 00	126
265	Southwick, . .	1,020	911,460	5,120	189	16 00	263
266	Wenham, . . .	1,010	3,303,250	21,311	16	8 00	349
267	Charlemont, . .	1,001	584,799	3,797	287	24 00	13
268	Berkley, . . .	999	563,587	3,544	309	19 00	150
269	Russell, . . .	965	1,718,026	9,439	54	15 50	274
270	Norfolk, . . .	960	1,163,852	6,501	120	14 50	289
271	Ashfield, . . .	959	538,305	4,790	212	19 50	134
272	Becket, . . .	959	651,934	5,053	193	18 00	189
273	Lanesborough, .	947	696,643	4,273	249	17 00	233
274	Gill, . . .	942	503,251	3,332	326	18 00	195
275	Lynnfield, . .	911	1,314,360	10,685	42	16 50	245
276	Berlin, . . .	904	647,995	4,729	216	15 00	284
277	Ashby, . . .	885	644,386	4,239	254	17 50	213
278	Mendon, . . .	880	717,575	4,296	246	20 00	118
279	Enfield, . . .	874	825,700	4,857	205	17 50	216
280	Southampton, .	870	573,954	4,189	258	20 00	125
281	Brimfield, . .	866	641,800	3,100	332	15 75	269
282	Whately, . . .	846	729,596	5,066	192	13 70	305
283	Tyngsborough, .	829	707,786	5,204	184	14 00	303

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS—KINDERGARTEN, ELEMENTARY AND HIGH— YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily at- tendance.
\$4 15	285	45	184	37	—	255	43,111	230
5 16	213	35	126	34	—	158	25,006	137
5 34	201	38	129	26	—	221	31,874	182
6 68	107	31	134	31	—	225	36,245	210
12 31	1	50	160	37	—	178	25,497	147
3 87	293	32	142	49	—	260	37,594	213
4 20	281	40	140	23	—	201	30,184	178
1 34	353	53	161	55	1	255	36,859	203
3 06	327	40	163	31	—	193	29,376	160
2 04	346	53	101	27	—	174	27,104	151
5 27	204	54	166	29	2	259	38,780	227
5 46	194	33	146	18	—	213	31,839	184
3 48	310	28	98	11	1	144	22,364	126
6 67	109	27	135	28	—	225	31,198	179
5 49	192	40	132	28	—	220	34,333	183
6 42	125	71	170	24	—	244	35,542	206
5 00	222	39	149	41	—	226	36,984	201
5 17	212	42	145	11	—	202	29,868	174
3 22 ¹	318 ¹	37	104	17	—	203	31,143	156
4 79	243	35	125	38	—	233	31,138	185
2 15	344	27	100	33	—	187	28,663	159
6 05	153	43	139	30	—	198	27,745	159
4 51	260	52	134	27	—	171	23,489	132
7 09	83	40	184	17	—	215	31,251	177
3 73	300	21	99	28	—	116	19,995	106
4 87	236	24	88	25	—	158	25,023	138
5 99	158	45	134	29	—	201	27,758	161
2 40	340	34	127	34	—	165	25,518	140
8 34	31	33	105	27	—	174	24,418	142
5 07	218	24	159	17	—	178	27,459	157
3 80	294	57	140	26	8	219	31,640	168
5 52	187	38	143	32	4	189	28,394	165
6 82	99	22	112	22	—	194	27,744	167
6 53	115	46	125	28	—	162	29,164	113
6 45	121	40	144	39	—	164	26,709	148
5 98	159	36	125	23	—	162	24,220	142
4 55	256	45	90	25	—	140	18,337	105
6 75	102	38	114	22	—	155	22,730	131
7 47	54	28	105	29	—	165	24,211	140
5 73	174	31	121	19	—	173	27,064	157
5 45	197	22	138	19	—	183	29,192	164
3 73	301	35	117	18	—	157	22,010	123
8 03	38	30	115	20	—	219	35,428	194
4 17	283	57	133	30	—	153	23,350	131
5 73	175	37	128	36	—	161	25,542	130

¹ Based on expenditures for 11 months only.

GROUP III. TOWNS. POPULATION LESS THAN 5,000.— 1914-15 — *Con.*

TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
	Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
239	Mattapoissett, . . .	188	240	—	2	7	—	—
240	Bedford, . . .	182	147	1	—	3	—	—
241	Conway, . . .	177	194	2	—	11	1	3
242	Littleton, . . .	180	215	—	4	9	1	3
243	Clarksburg, . . .	173	159	—	—	7	—	—
244	Tisbury, . . .	176	234	2	1	9	1	4
245	Edgartown, . . .	170	194	2	1	6	1	2
246	Nahant, . . .	173	222	1	2	15	1	2
247	Lincoln, . . .	184	172	—	2	6	—	—
248	Topsfield, . . .	180	160	—	2	7	1	3
249	Erving, . . .	171	240	—	1	8	—	—
250	Lakeville, . . .	173	198	—	—	7	—	—
251	Middleton, . . .	178	135	—	3	4	—	—
252	New Marlborough, . .	174	196	—	—	13	1	2
253	Sudbury, . . .	182	199	1	2	9	1	4
254	Hinsdale, . . .	187	225	—	—	9	—	—
255	Stow, . . .	184	213	—	3	9	1	3
256	Rochester, . . .	172	188	—	1	8	—	—
257	Longmeadow, . . .	194	187	1	2	6	—	—
258	Oak Bluffs, . . .	168	201	1	—	8	1	2
259	Orleans, . . .	180	172	—	1	7	1	3
260	Hubbardston, . . .	175	174	—	1	7	—	—
261	North Reading, . . .	178	155	—	2	4	—	—
262	Sunderland, . . .	177	187	—	2	6	—	—
263	Harvard, . . .	189	112	—	2	4	—	—
264	Wellfleet, . . .	188	147	—	1	6	1	2
265	Southwick, . . .	172	178	—	—	12	—	—
266	Wenham, . . .	182	155	—	4	7	—	—
267	Charlemont, . . .	172	154	—	1	10	1	3
268	Berkley, . . .	176	159	—	—	8	—	—
269	Russell, . . .	188	182	—	2	9	—	—
270	Norfolk, . . .	172	179	—	3	6	—	—
271	Ashfield, . . .	178	175	—	1	12	1	3
272	Becket, . . .	175	129	—	2	7	—	—
273	Lanesborough, . . .	185	163	—	1	7	—	—
274	Gill, . . .	171	151	—	—	6	—	—
275	Lynnfield, . . .	174	123	—	2	5	—	—
276	Berlin, . . .	173	137	—	2	6	—	—
277	Ashby, . . .	173	152	—	2	6	1	2
278	Mendon, . . .	173	167	—	—	7	1	2
279	Enfield, . . .	178	170	—	2	7	—	—
280	Southampton, . . .	179	137	—	—	8	—	—
281	Brimfield, . . .	183	207	—	2	10	1	4
282	Whately, . . .	178	144	2	2	5	—	—
283	Tyngsborough, . . .	196	136	—	2	4	—	—

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915—*Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
-	-	-	-	-	-	-
6,581	193	34	\$1,588 85	\$46 73	\$1,291 00	\$37 97
8,584	195	50	2,815 51	56 31	2,099 00	41 98
-	-	-	-	-	-	-
11,972	188	69	4,212 44	61 05	2,964 00	42 96
3,820	187	23	1,999 48	86 93	1,212 25	52 71
3,585	173	24	2,733 71	113 90	1,408 18	58 67
-	-	-	-	-	-	-
5,751	180	34	2,873 95	84 53	2,310 00	67 94
-	-	-	-	-	-	-
-	-	-	-	-	-	-
4,109	187	25	1 360 28	54 41	1,150 00	46 00
8,937	189	42	3,095 34	73 70	1,851 77	44 09
-	-	-	-	-	-	-
8,309	191	47	3,150 99	67 04	2,200 00	46 81
-	-	-	-	-	-	-
3,875	169	13	1,819 79	139 98	1,320 50	101 58
9,102	196	49	3,377 43	68 93	2,450 00	50 00
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
6,737	193	39	1,450 00	37 18	1,450 00	37 18
-	-	-	-	-	-	-
7,712	200	39	2,561 57	65 68	2,000 00	51 28
-	-	-	-	-	-	-
-	-	-	-	-	-	-
6,848	187	39	2,413 29	61 88	2,100 00	53 85
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
5,868	189	33	1,429 22	43 31	1,225 02	37 12
6,045	188	34	1,829 06	53 80	1,430 00	42 06
-	-	-	-	-	-	-
11,261	184	63	4,506 15	71 53	3,610 19	57 30
-	-	-	-	-	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
239	Mattapoisett,	\$134 56	\$212 98	—	\$330 00
240	Bedford,	32 75	630 00	\$1,150 00	325 00
241	Conway,	10 00	430 34	1,188 60	—
242	Littleton,	—	447 77	1,099 00	—
243	Clarksburg,	66 00	465 00	—	—
244	Tisbury,	95 00	522 64	1,752 00	600 00
245	Edgartown,	145 51	402 86	1,500 00	100 00
246	Nahant,	23 10	499 95	1,000 00	550 20
247	Lincoln,	21 16	621 97	—	850 00
248	Topsfield,	53 25	300 00	1,200 00	192 50
249	Erving,	86 67	633 78	—	114 75
250	Lakeville,	131 50	504 58	—	—
251	Middleton,	156 95	320 92	585 00	275 00
252	New Marlborough,	84 00	608 00	—	—
253	Sudbury,	101 00	488 84	1,000 00	462 50
254	Hinsdale,	97 50	652 84	—	—
255	Stow,	128 01	592 92	1,200 00	400 50
256	Rochester,	56 75	480 42	—	240 75
257	Longmeadow,	64 78	279 77	675 00	499 00
258	Oak Bluffs,	86 06	488 43	1,025 75	—
259	Orleans,	200 00	414 05	—	179 98
260	Hubbardston,	105 00	364 68	—	—
261	North Reading,	68 32	178 39	—	135 00
262	Sunderland,	13 50	334 83	—	283 13
263	Harvard,	90 00	397 98	—	282 00
264	Wellfleet,	95 00	261 60	950 00	80 00
265	Southwick,	119 70	603 89	—	—
266	Wenham,	110 00	514 07	570 00	511 50
267	Charlemont,	84 05	544 54	1,000 00	100 00
268	Berkley,	—	—	339 96	12 72
269	Russell,	154 05	450 00	—	—
270	Norfolk,	129 00	450 00	—	447 00
271	Ashfield,	—	660 00	—	127 00
272	Becket,	119 90	487 41	—	370 00
273	Lanesborough,	133 00	576 70	—	249 75
274	Gill,	45 00	300 00	—	85 00
275	Lynnfield,	58 51	366 36	1,300 00	375 00
276	Berlin,	72 50	260 67	—	300 00
277	Ashby,	35 00	365 47	—	275 67
278	Mendon,	23 06	672 62	—	—
279	Enfield,	115 00	420 00	650 00	624 00
280	Southampton,	65 00	112 50	—	—
281	Brimfield,	146 05	605 10	—	260 00
282	Whately,	113 50	260 48	500 00	268 92
283	Tyngsborough,	44 63	199 44	557 20	149 20

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION —
YEAR ENDING JUNE 30, 1915 — *Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$4,272 50	\$315 35	\$227 32	\$609 14	\$804 48	\$30 82
2,127 50	92 53	299 38	400 00	428 06	204 73
3,024 50	88 77	106 60	513 55	406 87	252 32
4,321 33	182 68	278 27	489 40	992 10	86 59
2,603 00	95 31	123 35	279 00	400 54	23 23
4,716 00	498 07	697 89	580 00	670 80	18 67
2,719 40	365 01	480 04	398 30	524 98	43 46
7,053 88	347 44	342 14	800 00	794 00	179 35
3,595 72	103 83	272 49	641 78	344 25	159 66
3,491 86	301 30	242 28	270 00	189 95	201 93
3,304 00	60 13	244 25	853 60	971 47	44 01
3,245 20	138 76	277 52	497 25	320 00	11 00
1,521 00	121 44	186 97	401 50	229 13	30 00
4,600 00	283 65	225 98	209 10	336 26	146 41
3,784 27	175 01	169 32	580 50	278 99	139 04
4,279 25	125 70	322 04	251 00	249 56	-
3,806 20	203 18	303 47	207 00	433 90	44 84
3,523 80	95 40	190 80	164 90	259 30	6 00
2,506 00	20 52	405 08	420 00	570 87	125 37
4,121 00	203 42	334 24	370 00	445 48	88 44
4,702 50	347 34	513 20	600 75	417 62	48 29
3,192 40	100 00	141 50	223 10	164 43	-
1,973 00	203 33	122 52	456 00	235 40	20 38
2,330 00	56 27	46 56	396 00	417 55	75 63
2,372 10	298 97	136 05	325 00	339 59	88 76
2,362 00	200 00	77 34	196 00	174 96	52 85
4,986 50	243 32	-	228 50	313 00	11 37
2,802 00	33 50	288 73	568 50	369 54	13 65
3,662 00	152 59	202 73	352 00	135 67	99 03
2,854 40	69 09	192 40	282 25	228 58	29 11
5,326 80	52 86	251 56	414 18	431 62	77 42
2,895 73	143 78	236 74	430 00	310 10	16 40
5,366 00	-	450 50	93 82	107 00	83 96
2,959 75	95 15	59 48	248 93	183 15	16 10
3,167 20	208 79	242 03	496 90	349 39	12 35
2,524 00	40 66	143 54	190 50	217 56	21 17
1,825 00	113 41	119 48	547 75	473 18	71 88
3,016 00	62 45	137 67	549 50	312 04	58 29
2,932 45	-	718 05	306 75	260 80	63 11
3,482 00	199 06	131 34	386 50	549 75	39 76
2,647 00	240 23	246 33	574 00	206 90	75 76
2,115 02	-	322 70	79 70	215 42	32 92
6,618 19	385 61	408 93	592 66	189 99	68 04
1,518 00	2 00	152 25	154 68	234 58	150 92
1,471 60	163 89	184 37	344 00	182 90	18 50

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING JUNE 30, 1915— <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
239	Mattapoisett,	\$209 54	—	\$14 40
240	Bedford,	84 13	—	50 00
241	Conway,	112 71	—	—
242	Littleton,	87 99	—	38 00
243	Clarksburg,	128 61	—	38 00
244	Tisbury,	844 38	\$53 76	150 60
245	Edgartown,	314 79	—	31 00
246	Nahant,	114 19	46 52	200 00
247	Lincoln,	490 28	—	217 80
248	Topsfield,	580 86	—	26 50
249	Erving,	158 31	—	35 40
250	Lakeville,	129 26	—	50 00
251	Middleton,	86 33	—	10 00
252	New Marlborough,	388 32	—	25 00
253	Sudbury,	44 13	—	50 00
254	Hinsdale,	500 88	—	75 00
255	Stow,	165 31	—	35 00
256	Rochester,	371 97	—	31 50
257	Longmeadow,	737 40	82	29 00
258	Oak Bluffs,	2,181 10	—	25 00
259	Orleans,	243 81	2 10	36 00
260	Hubbardston,	300 45	—	55 00
261	North Reading,	91 19	—	40 00
262	Sunderland,	127 90	—	20 00
263	Harvard,	—	—	25 00
264	Wellfleet,	516 42	—	—
265	Southwick,	362 92	—	50 00
266	Wenham,	149 46	—	46 00
267	Charlemont,	69 61	—	50 00
268	Berkley,	98 77	—	—
269	Russell,	531 81	—	35 00
270	Norfolk,	66 38	—	—
271	Ashfield,	89 44	—	41 00
272	Becket,	528 55	—	20 00
273	Lanesborough,	758 43	—	—
274	Gill,	982 18	—	37 00
275	Lynnfield,	84 79	—	35 50
276	Berlin,	298 94	—	35 20
277	Ashby,	192 69	—	25 00
278	Mendon,	157 81	—	50 00
279	Enfield,	369 26	—	25 00
280	Southampton,	354 81	—	3 25
281	Brimfield,	290 97	—	10 00
282	Whately,	303 98	—	30 00
283	Tyngsborough,	324 86	—	50 00

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915— <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$2,183 10	\$9 52	\$9,353 71	\$5 13	\$693 39	\$698 52
1,457 60	2,998 50	10,280 18	92 77	14 12	106 89
396 00	—	6,530 26	—	—	—
2,027 00	—	10,050 13	—	—	—
—	1,108 00	5,330 04	—	32 26	32 26
245 50	—	11,445 31	—	171 40	171 40
497 00	57 60	7,579 95	3,458 18	320 66	3,778 84
235 80	600 00	12,786 57	—	207 74	207 74
3,075 84	3,177 25	13,572 03	—	—	—
1,307 50	—	8,357 93	—	—	—
1,000 60	941 70	8,448 67	6,158 79	15 00	6,173 79
1,881 20	1,387 12	8,573 39	436 67	—	436 67
1,540 75	550 85	6,015 84	417 61	—	417 61
449 00	—	7,355 72	—	—	—
2,599 97	388 25	10,261 82	500 00	200 00	700 00
745 00	400 50	7,699 27	—	—	—
1,885 12	20 15	9,425 60	—	10 50	10 50
1,527 20	1,769 76	8,718 55	—	—	—
795 80	6,264 00	13,393 41	86 60	47 20	133 80
325 00	143 67	9,837 59	8,750 00	—	8,750 00
1,932 00	151 85	9,789 49	2,482 60	—	2,482 60
3,058 58	992 00	8,697 14	—	—	—
1,523 00	1,831 21	6,877 74	—	—	—
2,140 80	889 50	7,131 67	2,700 00	408 05	3,108 05
3,756 50	—	8,111 95	—	—	—
1,105 50	—	6,071 67	—	103 75	103 75
190 50	403 00	7,512 70	—	—	—
420 40	2,280 59	8,677 94	—	—	—
869 66	149 94	7,471 82	—	—	—
454 50	1,087 50	5,649 28	—	—	—
378 06	945 80	9,049 16	25,254 21	234 15	25,488 36
2,119 80	1,244 47	8,489 40	—	—	—
11 25	—	7,029 97	—	—	—
747 43	1,277 94	7,113 79	—	—	—
574 15	1,621 86	8,390 55	—	256 93	256 93
1,105 00	581 00	6,272 61	—	—	—
1,138 70	1,717 37	8,226 93	215 43	—	215 43
657 03	1,918 20	7,678 49	—	—	—
2,868 65	—	8,043 64	—	—	—
897 94	11 77	6,601 61	—	—	—
918 00	690 00	7,801 48	—	—	—
298 07	1,235 00	4,834 39	—	—	—
1,384 65	61 31	11,021 50	—	26 21	26 21
744 63	1,186 45	5,620 39	—	—	—
2,434 00	1,416 97	7,541 56	—	—	—

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION— YEAR ENDING DEC. 31, 1914.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
239	Mattapoisett,	\$7,858 24	\$32 74	164	\$1,230 85
240	Bedford,	9,603 83	65 33	7	615 50
241	Conway,	4,334 57	22 34	311	2,277 76
242	Littleton,	8,237 80	38 32	80	1,772 51
243	Clarksburg,	3,673 54	23 10	302	1,360 00
244	Tisbury,	7,824 22	33 44	154	1,835 01
245	Edgartown,	5,791 66	29 85	207	1,481 68
246	Nahant,	11,676 52	52 60	21	—
247	Lincoln,	12,260 16	71 28	5	267 50
248	Topsfield,	8,297 93	51 86	23	60 00
249	Erving,	5,677 58	23 66	295	2,160 56
250	Lakeville,	7,017 07	35 44	120	1,749 13
251	Middleton,	3,235 11	23 96	293	2,865 76
252	New Marlborough,	5,850 71	29 85	208	2,147 51
253	Sudbury,	8,221 08	41 31	58	1,917 76
254	Hinsdale,	4,792 92	21 30	323	3,183 40
255	Stow,	5,780 05	27 14	252	2,004 55
256	Rochester,	5,379 83	28 62	228	2,526 65
257	Longmeadow,	10,626 46 ¹	56 83 ¹	18 ¹	415 27 ¹
258	Oak Bluffs,	9,325 40	46 40	39	604 09
259	Orleans,	8,242 86	47 92	34	223 22
260	Hubbardston,	4,578 09	26 31	261	3,643 49
261	North Reading,	4,430 43	28 58	229	2,956 51
262	Sunderland,	4,835 23	25 86	269	3,157 97
263	Harvard,	6,740 95	60 19	13	1,362 82
264	Wellfleet,	4,100 00	27 89	240	1,687 40
265	Southwick,	5,457 10	30 66	192	1,630 51
266	Wenham,	7,918 71	51 09	27	312 50
267	Charlemont,	4,876 42	31 67	180	2,478 54
268	Berkley,	2,858 18	17 98	339	3,149 11
269	Russell,	6,521 40	35 83	113	1,706 24
270	Norfolk,	6,421 50	35 87	110	1,909 66
271	Ashfield,	5,720 69	32 69	166	2,254 38
272	Becket,	4,258 27	33 01	159	2,719 89
273	Lanesborough,	4,495 17	27 58	242	3,089 01
274	Gill,	3,009 34	19 93	333	2,591 51
275	Lynnfield,	5,984 84	48 66	31	1,961 88
276	Berlin,	4,373 32	31 92	176	2,415 62
277	Ashby,	4,815 77	31 68	178	2,195 91
278	Mendon,	4,114 97	24 64	284	2,419 22
279	Enfield,	4,500 00	26 47	259	3,528 01
280	Southampton,	2,140 00	15 62	344	2,609 96
281	Brimfield,	5,152 04	24 89	280	3,301 51
282	Whately,	3,044 40	21 14	326	1,593 11
283	Tyngsborough,	4,057 40	29 83	209	3,040 86

¹ Expenditures for 11 months only.

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914 — Con.				Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
From other sources.	FROM ALL SOURCES.				
	Amount.	Per pupil in average membership.	Rank.		
\$488 77	\$9,577 86	\$39 91	173	\$1,022 51	—
10 00	10,229 33	69 59	22	150 00	—
40 40	6,652 73	34 29	250	1,172 51	—
40 00	10,050 31	46 75	103	1,022 51	—
—	5,033 54	31 66	289	1,738 36	—
—	9,659 23	41 28	153	1,022 51	—
—	7,273 34	37 49	201	731 68	—
—	11,676 52	52 60	66	—	—
293 58	12,821 24	74 54	16	—	—
—	8,357 93	52 24	69	—	—
13 50	7,851 64	32 72	276	1,022 51	—
—	8,766 20	44 27	123	1,022 51	\$239 91
59 90	6,160 77	45 64	112	998 01	—
45 00	8,043 22	41 04	155	1,172 51	—
18 16	10,157 00	51 04	78	1,022 51	—
15 50	7,991 82	35 52	226	1,172 51	17 11
905 10	8,689 70	40 80	158	1,022 51	150 51
252 00	8,158 48	43 40	127	881 68	—
—	11,041 73 ¹	59 05 ¹	44 ¹	—	—
—	9,929 49	49 40	85	150 00	4 52
545 00	9,011 08	52 39	67	—	—
60 00	8,281 58	47 60	93	998 01	—
—	7,387 14	47 66	92	998 01	—
—	7,993 20	42 74	133	1,463 36	—
—	8,103 77	72 36	19	1,022 51	840 50
146 00	5,933 40	40 36	167	998 01	—
832 76	7,920 37	44 50	121	998 01	—
—	8,231 21	53 11	61	—	—
385 90	7,740 86	50 27	81	1,463 35	—
43 00	6,050 29	38 05	191	1,172 51	—
—	8,227 64	45 21	117	1,022 51	—
—	8,331 16	46 54	104	1,022 51	—
819 00	8,794 07	50 25	82	998 01	—
36 00	7,014 16	54 37	54	1,172 51	13 56
40 00	7,624 18	46 77	102	1,172 51	—
150 00	5,750 85	38 09	190	1,372 51	—
325 00	8,271 72	67 25	24	1,022 51	—
472 00	7,260 94	53 00	62	1,463 35	129 43
122 07	7,133 75	46 93	100	1,463 35	18 40
—	6,534 19	39 13	180	1,463 36	—
—	8,028 01	47 22	98	1,463 36	485 45
—	4,749 96	34 67	245	998 01	—
1,060 00	9,513 55	45 96	110	1,463 35	267 32
140 70	4,778 21	33 18	267	998 01	—
132 42	7,230 68	53 17	58	1,463 36	—

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
284	Princeton, . . .	818	\$1,485,128	\$11,424	36	\$16 50	247
285	Dover, . . .	798	8,385,497	62,578	2	5 50	352
286	Royalston, . . .	792	748,477	4,989	197	18 00	201
287	Granville, . . .	781	533,297	4,444	233	23 00	26
288	Bolton, . . .	764	759,402	7,301	93	18 00	191
289	Granby, . . .	761	663,320	4,574	224	16 00	258
290	Petersham, . . .	757	1,152,425	8,231	74	17 80	209
291	Bernardston, . . .	741	568,150	3,550	308	17 20	224
292	Dana, . . .	736	451,898	4,518	229	21 50	68
293	Leverett, . . .	728	392,009	2,613	347	16 20	254
294	Boxford, . . .	718	1,607,673	14,222	29	7 80	350
295	Blandford, . . .	717	695,403	6,560	119	21 00	81
296	Boylston, . . .	714	544,894	3,892	282	20 90	89
297	Truro, . . .	655	423,085	3,585	305	18 50	179
298	Richmond, . . .	650	610,338	7,096	101	23 00	29
299	Hampden, . . .	645	475,157	3,443	321	14 00	300
300	New Salem, . . .	639	406,760	3,447	319	21 00	84
301	Cummington, . . .	637	357,670	3,764	292	19 00	152
302	Brewster, . . .	631	863,995	8,554	68	14 00	296
303	Egremont, . . .	605	586,515	8,500	69	12 25	321
304	Burlington, . . .	591	997,624	9,152	55	13 40	310
305	Worthington, . . .	569	374,074	3,740	295	20 00	127
306	Sandisfield, . . .	566	438,292	4,764	213	20 30	111
307	Plympton, . . .	561	457,043	6,013	138	16 20	256
308	Oakham, . . .	552	367,774	3,752	294	15 60	272
309	Carlisle, . . .	551	492,404	8,206	75	18 00	192
310	Halifax, . . .	550	673,100	8,309	72	18 60	170
311	Chesterfield, . . .	536	362,691	4,168	260	17 00	231
312	Eastham, . . .	518	490,016	4,622	222	17 50	215
313	Savoy, . . .	503	194,895	2,240	352	26 00	3
314	Wendell, . . .	502	512,869	8,407	70	15 50	278
315	Otis, . . .	494	292,963	3,854	285	19 50	138
316	Warwick, . . .	477	469,188	5,392	176	15 80	268
317	Pelham, . . .	467	439,172	4,222	256	12 50	320
318	Hancock, . . .	465	415,230	5,126	188	11 70	330
319	New Braintree, . . .	464	412,369	6,872	110	17 00	235
320	Rowe, . . .	456	263,554	3,993	276	23 50	18
321	Greenwich, . . .	452	252,643	6,316	130	20 60	99
322	West Tisbury, . . .	437	756,983	3,770	290	9 00	347
323	Phillipston, . . .	426	311,753	4,518	230	20 50	105
324	Hawley, . . .	424	253,564	3,054	335	22 00	51
325	Westhampton, . . .	423	266,468	3,373	325	19 00	160
326	Paxton, . . .	416	407,948	5,999	141	20 00	122
327	Dunstable, . . .	408	409,955	9,110	56	15 20	282
328	Plainfield, . . .	406	194,882	3,194	331	22 00	59

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily attendance.
\$3 78	295	20	82	19	1	147	22,342	124
1 53	349	29	103	22	—	148	23,106	123
5 48	193	30	128	23	—	144	24,896	142
6 67	108	12	98	26	—	126	17,910	104
7 88	41	24	78	29	—	112	16,738	90
7 10	81	37	113	19	—	154	22,789	131
5 21	210	22	97	29	—	150	23,123	129
5 92	162	19	117	30	—	173	25,159	147
4 97	226	24	65	18	1	99	16,161	93
5 77	171	17	116	12	—	160	23,817	138
1 89	347	34	99	16	—	139	17,337	101
4 51	259	31	85	19	—	128	16,644	95
9 81	7	24	127	32	—	146	22,542	131
4 03	289	33	91	22	—	125	20,839	110
5 23	209	16	74	16	—	100	14,727	82
4 34	274	21	94	20	—	142	22,799	122
7 06	86	16	71	11	—	126	20,289	112
5 88	166	22	75	28	—	97	14,422	91
4 40	270	36	57	15	—	115	17,297	93
2 58	338	15	57	12	—	91	11,945	65
3 75	299	33	89	20	—	116	18,937	104
6 96	92	13	100	9	—	117	16,375	89
5 70	178	29	76	21	2	107	14,013	86
4 03	288	15	66	18	—	84	11,813	69
6 53	116	17	72	15	—	110	14,406	92
6 26	138	13	54	12	—	72	10,363	60
4 61	253	20	63	26	—	87	13,095	74
8 24	35	16	75	16	—	94	13,433	79
4 98	225	19	87	14	—	117	17,362	99
12 18	2	18	71	15	—	94	11,391	77
4 45	265	14	50	15	—	68	9,897	57
4 46	264	14	51	10	—	96	12,900	68
5 46	195	14	74	17	—	94	13,611	73
2 90	334	39	98	19	—	128	17,181	97
4 70	247	19	68	13	—	85	11,776	76
7 04	88	14	59	18	—	64	9,673	56
3 60	307	18	60	14	—	69	8,657	64
3 36	315	9	57	13	—	42	6,875	40
9 38	9	10	50	7	—	69	10,243	62
5 81	170	17	59	17	—	75	10,617	62
7 11	80	21	68	27	—	98	12,123	76
4 50	262	9	61	12	—	79	12,012	73
5 61	184	14	65	15	1	64	10,492	62
4 16	284	10	32	10	—	48	7,697	43
11 43	3	15	40	12	—	69	8,312	53

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
		Average number of days schools were in session.	Average mem- bership.	Supervising prin- cipals and princ- ipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
284	Princeton, . . .	187	130	1	3	8	1	1	15
285	Dover, . . .	179	134	—	4	8	1	4	25
286	Royalston, . . .	175	150	—	1	8	—	—	—
287	Granville, . . .	172	120	—	—	10	—	—	—
288	Bolton, . . .	185	104	—	2	6	1	2	14
289	Granby, . . .	175	145	1	1	8	1	3	15
290	Petersham, . . .	179	140	—	2	9	1	4	40
291	Bernardston, . .	170	160	—	1	8	1	2	32
292	Dana, . . .	174	100	—	2	4	—	—	—
293	Leverett, . . .	173	150	—	1	5	—	—	—
294	Boxford, . . .	172	113	—	2	6	—	—	—
295	Blandford, . . .	174	106	—	2	7	—	—	—
296	Boylston, . . .	172	140	—	2	4	—	—	—
297	Truro, . . .	190	118	—	—	5	—	—	—
298	Richmond, . . .	186	86	—	1	6	—	—	—
299	Hampden, . . .	186	138	—	2	6	—	—	—
300	New Salem, . .	181	118	—	—	8	1	2	23
301	Cummington, . .	159	95	—	1	7	—	—	—
302	Brewster, . . .	187	101	—	2	5	1	2	21
303	Egremont, . . .	184	69	—	1	3	—	—	—
304	Burlington, . .	182	109	1	2	3	—	—	—
305	Worthington, . .	178	100	—	2	7	1	1	2
306	Sandisfield, . .	163	92	—	—	7	—	—	—
307	Plympton, . . .	171	76	—	1	3	—	—	—
308	Oakham, . . .	157	98	—	1	5	—	—	—
309	Carlisle, . . .	171	60	—	—	3	—	—	—
310	Halifax, . . .	178	81	—	1	3	—	—	—
311	Chesterfield, . .	169	87	—	—	5	—	—	—
312	Eastham, . . .	175	106	—	1	3	—	—	—
313	Savoy, . . .	148	87	—	—	7	—	—	—
314	Wendell, . . .	173	61	—	—	4	—	—	—
315	Otis, . . .	190	76	—	—	6	—	—	—
316	Warwick, . . .	173	87	—	—	3	—	—	—
317	Pelham, . . .	177	104	—	—	5	—	—	—
318	Hancock, . . .	176	81	—	—	5	—	—	—
319	New Braintree, .	174	60	—	2	3	—	—	—
320	Rowe, . . .	164	66	—	—	4	—	—	—
321	Greenwich, . . .	174	40	—	2	2	—	—	—
322	West Tisbury, . .	165	67	—	—	4	1	1	8
323	Phillipston, . .	172	69	—	1	4	—	—	—
324	Hawley, . . .	160	83	—	—	8	—	—	—
325	Westhampton, . .	172	79	—	1	6	—	—	—
326	Paxton, . . .	169	68	—	1	3	—	—	—
327	Dunstable, . . .	178	45	—	1	3	—	—	—
328	Plainfield, . . .	158	61	—	1	5	—	—	—

SCHOOL RETURNS.

LXXXI

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915 — *Con.*

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
2,902	194	15	\$1,282 85	\$85 52	\$1,000 00	\$66 67
6,267	190	34	5,835 81	171 64	3,550 00	104 41
-	-	-	-	-	-	-
2,468	193	14	1,922 36	137 31	1,387 00	99 07
2,498	188	15	1,919 49	127 97	1,500 00	100 00
6,606	188	39	4,380 34	112 32	3,275 01	83 95
5,107	191	29	2,224 52	76 71	1,650 00	56 90
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
4,023	186	22	1,695 70	77 08	1,300 00	59 09
3,535	191	20	2,136 48	106 82	1,419 99	71 00
-	-	-	-	-	-	-
169	178	1	1,860 13	1,860 13	432 00	432 00
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
1,249	164	8	575 04	71 88	288 86	36 11
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
284	Princeton,	\$3 00	\$338 01	\$1,000 00	\$306 50
285	Dover,	259 11	341 58	2,400 00	708 00
286	Royalston,	150 02	367 01	—	270 00
287	Granville,	91 40	514 70	—	—
288	Bolton,	47 63	385 63	812 00	225 00
289	Granby,	153 40	373 17	1,000 00	185 00
290	Petersham,	105 50	411 39	1,000 00	—
291	Bernardston,	92 75	380 29	—	93 00
292	Dana,	85 00	361 40	—	175 00
293	Leverett,	78 84	395 25	—	119 00
294	Boxford,	—	349 25	—	442 50
295	Blandford,	—	405 00	—	330 00
296	Boylston,	60 00	217 82	—	131 00
297	Truro,	90 00	260 76	—	—
298	Richmond,	28 50	515 60	—	330 00
299	Hampden,	86 52	271 69	—	188 56
300	New Salem,	89 93	629 38	—	—
301	Cummington,	52 58	490 95	—	126 75
302	Brewster,	112 00	273 02	—	353 97
303	Egremont,	—	252 60	—	—
304	Burlington,	25 63	270 00	650 00	135 34
305	Worthington,	110 50	408 78	—	288 00
306	Sandisfield,	73 18	430 30	—	—
307	Plympton,	61 40	259 80	—	125 00
308	Oakham,	79 06	229 95	—	104 00
309	Carlisle,	25 00	230 27	—	—
310	Halifax,	72 40	236 00	—	125 00
311	Chesterfield,	48 55	389 57	—	—
312	Eastham,	—	242 86	—	77 49
313	Savoy,	70 07	459 31	—	—
314	Wendell,	78 25	310 00	—	—
315	Otis,	45 00	210 00	—	—
316	Warwick,	28 91	374 83	—	—
317	Pelham,	—	350 00	—	—
318	Hancock,	61 55	400 60	—	—
319	New Braintree,	38 25	475 99	—	255 69
320	Rowe,	61 11	224 04	—	—
321	Greenwich,	45 88	182 24	—	87 50
322	West Tisbury,	20 00	309 53	—	—
323	Phillipston,	71 96	189 22	—	—
324	Hawley,	28 63	486 77	—	—
325	Westhampton,	43 50	255 00	—	131 25
326	Paxton,	71 00	167 98	—	87 50
327	Dunstable,	15 20	189 96	570 00	52 50
328	Plainfield,	18 83	337 12	—	51 00

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION —
YEAR ENDING JUNE 30, 1915 — *Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$3,209 40	\$148 05	\$186 04	\$534 60	\$527 65	\$113 68
4,050 00	196 46	729 03	602 75	654 36	102 97
3,334 50	23 64	120 59	290 00	479 30	14 37
3,544 00	81 28	136 64	145 93	135 60	12 00
2,475 00	117 31	81 30	264 00	219 38	40 78
3,133 00	199 72	151 83	267 94	293 10	43 87
4,960 06	155 41	166 72	458 15	528 25	9 25
3,911 00	146 26	151 57	288 65	213 60	67 47
1,745 90	57 17	60 71	388 50	161 26	23 84
1,944 00	51 56	60 49	67 65	47 00	2 80
2,532 00	38 09	50 21	174 00	197 88	127 88
2,679 91	11 41	44 70	20 20	93 25	82 15
2,053 00	157 26	88 28	459 00	301 00	86 00
2,204 00	206 46	4 35	66 00	158 06	63 89
2,719 60	119 30	150 91	149 50	150 50	9 64
2,707 89	147 33	49 11	155 40	194 53	10 00
3,336 00	66 80	116 25	57 55	282 77	4 05
2,300 60	234 31	—	120 72	216 00	5 15
3,112 13	230 85	113 00	202 14	137 04	72 00
1,939 00	—	307 70	109 30	111 32	64 46
1,714 75	113 88	106 34	185 41	369 83	19 38
2,577 00	59 34	112 27	100 10	178 25	—
2,300 30	16 91	92 48	79 00	79 50	4 77
1,224 00	27 76	66 73	164 00	61 50	9 40
1,745 60	59 31	87 43	85 42	161 29	3 20
1,352 00	49 42	34 24	358 00	324 12	10 70
1,235 00	56 23	55 22	177 95	78 90	—
2,126 00	140 20	114 05	96 25	47 37	10 74
1,670 25	57 56	100 00	156 00	183 59	26 25
2,100 00	68 81	68 61	2 50	81 50	92
1,679 00	4 80	62 77	54 10	65 75	8 86
2,272 00	40 38	72 03	41 74	81 16	—
1,260 00	54 89	18 79	200 00	93 68	4 07
2,156 20	38 22	30 62	96 86	82 38	25 75
2,034 00	99 69	115 15	95 50	60 79	—
1,438 62	24 35	89 62	82 50	81 86	17 55
1,440 00	37 74	51 83	36 00	25 98	4 85
828 00	6 39	42 12	56 00	73 00	12 50
1,939 78	184 46	177 85	178 50	146 14	14 99
1,674 00	47 45	37 15	79 00	77 75	17 00
2,470 40	38 22	37 12	65 05	108 00	18 47
2,134 60	87 08	32 65	48 25	68 95	9 85
1,168 00	49 23	62 29	216 85	129 00	9 79
950 00	28 71	73 16	304 00	222 99	2 15
1,559 20	48 67	68 53	69 85	45 00	7 00

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
284	Princeton,	\$104 96	—	—
285	Dover,	416 87	—	\$25 00
286	Royalston,	163 71	—	30 00
287	Granville,	301 08	—	25 00
288	Bolton,	352 24	\$21 60	22 50
289	Granby,	133 62	—	—
290	Petersham,	402 03	22 80	25 35
291	Bernardston,	443 85	—	25 00
292	Dana,	33 21	—	10 00
293	Leverett,	135 49	—	22 00
294	Boxford,	192 05	—	35 00
295	Blandford,	144 10	—	15 00
296	Boylston,	395 98	—	75 00
297	Truro,	375 00	—	—
298	Richmond,	255 31	—	30 00
299	Hampden,	243 04	—	20 00
300	New Salem,	58 83	—	15 00
301	Cummington,	187 15	—	30 00
302	Brewster,	64 87	—	10 00
303	Egremont,	68 97	—	—
304	Burlington,	109 75	77	64 00
305	Worthington,	139 18	—	45 00
306	Sandisfield,	49 00	—	20 00
307	Plympton,	38 27	—	25 00
308	Oakham,	21 85	—	22 50
309	Carlisle,	42 51	—	25 00
310	Halifax,	48 30	—	25 00
311	Chesterfield,	217 98	—	44 00
312	Eastham,	65 67	—	25 00
313	Savoy,	227 65	—	28 00
314	Wendell,	106 02	—	4 00
315	Otis,	543 84	—	4 00
316	Warwick,	233 92	—	15 34
317	Pelham,	76 99	—	25 50
318	Hancock,	74 43	—	30 00
319	New Braintree,	414 42	—	15 00
320	Rowe,	13 11	—	25 00
321	Greenwich,	135 12	—	4 00
322	West Tisbury,	49 11	—	—
323	Phillipston,	41 00	—	20 00
324	Hawley,	2 49	—	25 00
325	Westhampton,	36 97	—	26 35
326	Paxton,	246 24	—	10 00
327	Dunstable,	50 77	—	5 00
328	Plainfield,	24 82	—	23 00

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$539 40	\$164 41	\$7,175 70	—	\$35 13	\$35 13
2,794 72	21 00	13,301 85	—	42 98	42 98
1,551 40	393 23	7,187 77	—	—	—
1,011 00	908 50	6,907 13	—	—	—
2,474 50	6 36	7,545 23	—	—	—
1,121 90	90 80	7,147 35	—	—	—
1,561 02	130 73	9,936 66	—	—	—
297 20	15 80	6,126 44	—	—	—
1,109 79	773 00	4,984 78	—	—	—
1,113 65	40 00	4,077 73	—	—	—
252 00	201 00	4,591 86	—	211 36	211 36
1,145 75	630 50	5,601 97	—	133 00	133 00
2,458 00	1,220 02	7,702 36	—	—	—
206 00	174 50	3,809 02	—	—	—
268 59	703 89	5,431 34	—	—	—
133 65	2 00	4,209 72	—	—	—
446 80	127 25	5,230 61	—	—	—
1,134 03	1,240 00	6,138 24	—	—	—
1,571 66	—	6,252 68	—	—	—
23 00	216 00	3,092 35	—	—	—
1,225 00	1,222 89	6,212 97	—	122 19	122 19
1,327 58	668 00	6,014 00	—	89 94	89 94
312 15	272 00	3,729 59	—	—	—
584 60	783 00	3,430 46	—	—	—
1,147 70	222 00	3,969 31	—	—	—
2,083 00	2,059 10	6,593 36	—	—	—
2,414 90	1,120 00	5,644 90	—	—	—
747 60	47 50	4,029 81	—	—	—
1,790 00	523 58	4,918 25	—	—	—
120 00	113 20	3,340 57	—	—	—
555 19	230 00	3,158 74	—	—	—
489 00	244 39	4,043 54	—	—	—
2,604 20	475 00	5,363 63	—	—	—
237 92	315 00	3,435 44	—	—	—
186 60	—	3,158 31	—	—	—
988 60	—	3,922 45	—	90 99	90 99
499 85	189 00	2,608 51	—	—	—
1,113 88	363 00	2,949 63	—	—	—
192 30	9 23	3,221 89	—	—	—
736 80	781 24	3,772 57	—	—	—
110 10	155 00	3,545 25	—	—	—
8 70	310 00	3,193 15	—	—	—
1,588 30	995 00	4,801 18	—	—	—
1,877 54	603 75	4,945 73	—	—	—
288 50	140 00	2,681 52	—	—	—

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
284	Princeton,	\$5,618 33	\$43 22	50	\$1,272 51
285	Dover,	12,843 58	95 85	2	38 00
286	Royalston,	4,104 39	27 36	245	2,110 37
287	Granville,	3,559 22	29 66	212	2,078 36
288	Bolton,	5,982 49	57 52	17	2,213 35
289	Granby,	4,709 87	32 48	169	2,380 23
290	Petersham,	6,013 51	42 95	51	2,063 26
291	Bernardston,	3,362 22	21 01	328	1,694 68
292	Dana,	2,247 72	22 48	308	2,974 40
293	Leverett,	2,261 12	15 07	346	1,848 76
294	Boxford,	3,043 20	26 93	255	1,638 73
295	Blandford,	3,139 36	29 62	214	2,229 85
296	Boylston,	5,347 58	38 20	84	3,050 05
297	Truro,	1,704 37	14 44	349	2,027 15
298	Richmond,	3,190 61	37 10	97	1,654 27
299	Hampden,	2,062 97	14 95	347	2,722 30
300	New Salem,	2,871 00	24 33	288	2,594 65
301	Cummington,	2,104 63	22 15	313	3,006 58
302	Brewster,	3,800 00	37 62	88	2,197 89
303	Egremont,	1,512 11	21 92	315	1,421 05
304	Burlington,	3,743 07	32 34	170	1,937 01
305	Worthington,	2,604 17	26 04	266	3,065 44
306	Sandisfield,	2,500 43	27 18	250	1,242 66
307	Plympton,	1,842 48	24 24	290	1,599 69
308	Oakham,	2,400 41	24 49	286	2,173 18
309	Carlisle,	3,080 89	51 35	25	3,000 71
310	Halifax,	3,101 32	38 29	81	1,772 57
311	Chesterfield,	2,990 68	34 38	138	1,019 54
312	Eastham,	2,438 70	23 01	303	2,131 94
313	Savoy,	2,375 45	27 30	247	1,002 36
314	Wendell,	2,284 50	37 45	91	1,336 61
315	Otis,	1,307 84	17 21	341	1,905 47
316	Warwick,	2,563 45	29 47	218	2,627 86
317	Pelham,	1,273 79	12 25	351	2,245 35
318	Hancock,	1,951 15	24 09	292	1,430 18
319	New Braintree,	2,902 36	48 37	33	2,972 52
320	Rowe,	948 85	14 38	350	1,701 44
321	Greenwich,	850 00	21 25	325	2,069 63
322	West Tisbury,	2,370 76	35 38	122	487 50
323	Phillipston,	1,811 17	26 25	263	1,934 46
324	Hawley,	1,802 44	21 72	318	2,304 51
325	Westhampton,	1,200 00	15 19	345	1,988 31
326	Paxton,	2,289 95	33 68	150	2,409 01
327	Dunstable,	1,707 13	37 94	85	3,376 48
328	Plainfield,	2,228 58	36 53	103	1,402 39

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914 — Con.				Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
From other sources.	FROM ALL SOURCES.				
	Amount.	Per pupil in average membership.	Rank.		
\$20 00	\$6,910 84	\$53 16	59	\$1,022 51	—
252 00	13,133 58	98 01	9	—	—
469 40	6,684 16	44 36	119	1,172 51	\$151 76
172 50	5,810 08	48 42	90	1,463 36	—
402 45	8,598 29	82 68	13	1,463 35	—
269 81	7,359 91	50 76	80	1,463 36	—
175 03	8,251 80	58 94	45	1,313 36	—
1,084 40	6,141 30	38 38	188	881 68	—
60 00	5,282 12	52 82	64	1,273 01	—
—	4,109 88	27 40	336	1,372 51	—
190 21	4,872 14	43 12	130	1,022 51	—
170 59	5,539 80	52 26	68	998 01	—
—	8,397 63	59 98	39	1,463 35	—
77 50	3,809 02	32 28	282	1,273 01	—
9 00	4,853 88	56 44	50	998 01	372 72
—	4,785 27	34 68	244	1,198 01	—
88 50	5,554 15	47 07	99	1,447 51	101 84
244 29	5,355 50	56 37	51	1,447 51	—
—	5,997 89	59 39	43	1,463 35	72 16
—	2,933 16	42 51	136	881 68	—
—	5,680 08	52 11	70	998 01	—
213 05	5,882 66	58 83	47	1,372 51	—
77 40	3,820 49	41 53	148	1,273 01	—
2 00	3,444 17	45 32	114	1,081 68	400 00
189 50	4,763 09	48 60	89	1,081 68	—
31 76	6,113 36	101 89	5	1,198 01	211 68
55 50	4,929 39	60 86	34	998 01	357 11
—	4,010 22	46 09	109	1,273 01	—
284 10	4,854 74	45 80	111	1,198 01	—
—	3,377 81	38 83	184	1,447 51	—
41 43	3,662 54	60 04	37	998 01	—
168 75	3,382 06	44 50	120	1,447 51	—
20 20	5,211 51	59 90	41	1,663 36	—
—	3,519 14	33 84	258	1,372 51	—
13 00	3,394 33	41 91	145	1,081 68	—
18 00	5,892 88	98 22	8	1,372 51	—
8 68	2,658 97	40 29	170	1,447 51	239 51
30 00	2,949 63	73 74	17	1,198 01	192 82
—	2,858 26	42 66	134	300 00	—
54 00	3,799 63	55 07	52	1,372 51	—
—	4,106 95	49 48	84	1,273 01	—
304 82	3,493 13	44 22	124	1,198 01	437 78
—	4,698 96	59 99	38	1,198 01	—
25 00	5,108 61	113 53	2	1,663 36	—
22 75	3,653 72	59 90	40	1,273 01	721 72

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	Population, United States Census of 1910.	Valuation April 1, 1914.	VALUATION PER PUPIL IN AVERAGE MEMBERSHIP, SCHOOL YEAR ENDING JUNE 30, 1915.		RATE OF TOTAL TAX PER \$1,000 OF VALUATION.	
				Amount.	Rank.	Amount.	Rank.
329	Windsor,	404	\$295,222	\$4,928	200	\$19 90	128
330	Florida,	395	379,972	4,809	210	25 50	6
331	Monterey,	388	381,003	6,684	116	14 25	293
332	Tyringham,	382	361,507	10,041	49	19 30	144
333	Leyden,	363	227,965	2,960	337	16 00	260
334	Middlefield,	354	214,802	2,468	350	20 00	119
335	Heath,	346	235,723	4,064	270	20 00	116
336	Wales,	345	259,358	7,009	104	13 70	304
337	Prescott,	320	210,229	3,893	281	15 30	281
338	Boxborough,	317	288,183	4,237	255	14 00	295
339	Chilmark,	282	395,951	17,997	19	13 00	313
340	Goshen,	279	238,001	4,857	206	13 60	306
341	Washington,	277	299,875	7,689	86	18 50	180
342	Alford,	275	200,400	4,008	275	17 90	205
343	Mashpee,	270	260,000	6,487	122	18 50	174
344	Shutesbury,	267	344,102	7,022	103	14 00	302
345	Monroe,	246	185,659	3,867	284	18 00	198
346	Peru,	237	167,356	6,694	115	18 00	200
347	Montgomery,	217	159,069	5,681	157	17 20	225
348	Tolland,	180	260,684	14,482	27	14 50	290
349	Gay Head,	162	45,028	15,009	26	11 00	334
350	Gosnold,	152	818,868	81,886	1	6 50	351
351	Holland,	145	116,133	5,806	149	21 60	64
352	Mount Washington,	110	141,882	10,914	39	16 50	249
353	New Ashford,	92	71,470	6,497	121	20 20	46
	Totals,	417,205	\$504,163,835	\$7,041	—	—	—
	State,	3,366,416	\$4,602,965,509	\$8,506	—	—	—

ERRATUM.

For total number of illiterates in the State sixteen to twenty-one years, substitute the following figures: —

17,413.

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

EXPENDITURE PER \$1,000 OF VALUATION FOR SCHOOL SUPPORT FROM LOCAL TAXATION, YEAR ENDING DEC. 31, 1914.		SCHOOL CENSUS DATA, SEPT. 1, 1914.				ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915.		
Amount.	Rank.	Persons 5 to 7 years.	Persons 7 to 14 years.	Persons 14 to 16 years.	Illiterates 16 to 21 years.	Pupils enrolled.	Aggregate days of attendance.	Average daily attendance.
\$9 26	12	15	52	11	—	70	9,666	57
4 18	282	19	61	14	—	95	11,231	73
2 48	339	11	49	6	—	66	8,932	52
3 05	328	4	48	2	—	47	5,474	33
5 92	163	19	62	13	—	93	11,524	68
8 75	18	15	58	16	—	108	13,123	79
9 33	10	11	47	10	—	64	9,266	57
3 14	321	11	30	9	—	41	5,610	32
4 70	248	13	43	11	—	57	9,048	52
5 13	214	10	55	10	—	68	11,057	60
2 65	337	2	24	9	—	25	3,393	21
3 37	314	4	43	5	—	53	7,430	46
3 95	292	8	43	5	—	55	6,398	36
5 93	161	11	40	12	—	59	8,314	46
3 77	297	4	45	9	—	47	6,305	38
3 03	329	10	42	5	—	52	8,042	46
3 07	326	13	46	5	—	73	7,279	43
5 26	205	5	18	6	—	36	3,804	22
4 09	287	5	25	6	—	29	4,480	26
4 50	261	7	18	3	—	22	3,023	17
3 38	313	4	20	3	—	34	4,738	28
1 38	352	2	7	1	—	12	1,880	10
3 62	304	5	18	2	—	21	3,150	18
2 12	345	2	9	3	—	16	2,460	13
5 32	202	3	12	1	—	16	1,876	10
\$4 74	—	15,558	53,348	11,778	1,513	77,803	11,971,337	66,920
\$4 60	—	122,238	428,916	100,817	27,013	591,582	92,793,785	506,910

BOARD OF EDUCATION.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	ATTENDANCE IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		POSITIONS IN PUBLIC DAY SCHOOLS — KINDERGARTEN, ELEMENTARY AND HIGH — JAN. 1, 1915.			PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915.		
		Average number of days schools were in session.	Average men- bership.	Supervising prin- cipals and prin- cipals.	Supervisors.	Teachers.	Number of schools.	Number of teach- ers, including principals.	Pupils enrolled.
329	Windsor, . . .	171	60	-	-	5	-	-	-
330	Florida, . . .	155	79	-	-	5	-	-	-
331	Monterey, . . .	176	57	-	-	3	-	-	-
332	Tyringham, . . .	168	36	-	-	2	-	-	-
333	Leyden, . . .	169	77	-	2	5	-	-	-
334	Middlefield, . . .	175	87	-	2	7	-	-	-
335	Heath, . . .	163	58	-	1	4	-	-	-
336	Wales, . . .	174	37	-	2	2	-	-	-
337	Prescott, . . .	173	54	-	1	4	-	-	-
338	Boxborough, . . .	171	68	1	-	6	-	-	-
339	Chilmark, . . .	164	22	-	-	2	-	-	-
340	Goshen, . . .	162	49	-	1	3	-	-	-
341	Washington, . . .	177	39	-	-	4	-	-	-
342	Alford, . . .	182	50	-	1	3	-	-	-
343	Mashpee, . . .	166	41	1	2	2	-	-	-
344	Shutesbury, . . .	174	49	-	-	3	-	-	-
345	Monroe, . . .	169	48	-	-	2	-	-	-
346	Peru, . . .	176	25	-	-	3	-	-	-
347	Montgomery, . . .	172	28	-	2	3	-	-	-
348	Tolland, . . .	173	18	-	-	1	-	-	-
349	Gay Head, . . .	171	30	-	-	2	-	-	-
350	Gosnold, . . .	188	10	-	-	1	-	-	-
351	Holland, . . .	177	20	-	2	1	-	-	-
352	Mount Washington,	192	13	-	-	2	-	-	-
353	New Ashford, . . .	177	11	-	-	1	-	-	-
	Totals, . . .	179	71,599	88	376	2,807	131	491	9,051
	State, . . .	183	541,088	768	780	16,694	257 ¹	3,227	81,853

¹ Academies or other schools serving as high schools in towns, but which are not "under the order and superintendence of the town authorities," are not reported this year as public high schools.

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

PUBLIC DAY HIGH SCHOOLS, YEAR ENDING JUNE 30, 1915 — CON.

Aggregate days of attendance.	Number of days actually in session.	Average membership.	EXPENDITURE FOR SUPPORT.		EXPENDITURE FOR SALARIES AND EXPENSES OF PRINCIPALS AND FOR SALARIES OF TEACHERS.	
			Amount.	Cost per pupil in average membership.	Amount.	Cost per pupil in average membership.
1,515,170	190	8,434	\$582,872 17	\$69 11	\$375,313 38	\$44 50
13,490,689	189	76,396	\$5,371,359 48	\$70 31	\$3,719,422 66	\$48 69

GROUP III. TOWNS. POPULATION LESS THAN 5,000.—1914-15—*Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS—DAY, EVENING AND VACATION—YEAR ENDING JUNE 30, 1915.			
		School committee and business offices.	Superintendents' salaries and business offices.	Principals' salaries and expenses.	Supervisors' salaries and expenses.
329	Windsor,	\$53 45	\$410 25	—	—
330	Florida,	84 00	313 15	—	—
331	Monterey,	93 95	210 00	—	—
332	Tyringham,	45 00	97 34	—	—
333	Leyden,	35 00	387 79	—	\$173 20
334	Middlefield,	29 00	332 10	—	360 00
335	Heath,	58 70	238 46	—	85 00
336	Wales,	7 50	227 67	—	213 93
337	Prescott,	61 43	360 67	—	65 00
338	Boxborough,	15 00	99 83	\$240 00	—
339	Chilmark,	53 50	211 86	—	—
340	Goshen,	17 42	205 98	—	105 00
341	Washington,	34 00	291 30	—	—
342	Alford,	—	252 63	—	228 00
343	Mashpee,	49 82	244 73	550 00	141 88
344	Shutesbury,	64 15	234 31	—	—
345	Monroe,	23 00	318 03	—	—
346	Peru,	40 51	253 22	—	—
347	Montgomery,	19 50	155 16	—	171 00
348	Tolland,	70 00	171 50	—	—
349	Gay Head,	28 00	100 62	—	—
350	Gosnold,	31 25	—	—	—
351	Holland,	21 00	113 33	—	144 73
352	Mount Washington,	25 00	160 00	—	—
353	New Ashford,	32 00	80 00	—	—
	Totals,	\$27,144 64	\$153,171 21	\$161,522 15	\$87,567 19
	State,	\$393,694 18	\$615,836 40	\$1,464,151 82	\$469,926 06

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION —
YEAR ENDING JUNE 30, 1915 — *Con.*

Teachers' salaries.	Text-books.	Stationery, supplies and other expenses of instruction.	Janitors' service.	Fuel.	Miscellaneous expenses of operation.
\$1,998 25	\$31 81	\$98 56	\$54 40	\$84 25	—
1,747 00	56 16	80 29	50 50	63 88	—
1,133 00	—	179 23	32 40	—	—
1,112 00	—	31 34	46 50	73 40	\$83 09
1,905 80	58 21	52 68	53 00	140 39	20 23
2,825 50	41 25	77 12	94 35	96 50	—
1,304 00	65 00	38 80	29 25	57 87	28 87
896 00	3 37	51 12	108 00	82 95	22 50
1,476 00	25 59	39 90	65 74	62 38	1 65
1,808 00	97 44	104 78	35 55	97 00	138 99
1,380 19	14 20	20 34	92 51	52 37	70
1,254 00	99 89	—	28 00	54 83	—
1,834 27	37 11	55 82	15 10	49 20	—
1,402 00	12 80	38 85	70 18	72 00	—
425 00	12 79	103 44	153 00	74 15	27 10
1,137 50	26 78	16 52	37 60	34 79	1 75
1,103 99	48 72	98 72	38 00	136 85	—
1,219 00	42 80	47 13	13 00	43 25	—
1,188 00	12 59	19 19	24 95	28 75	33 66
555 00	—	98 72	21 75	34 00	—
1,105 00	23 41	49 42	47 25	51 62	2 50
712 50	—	50 96	38 00	36 75	42 58
702 00	7 06	17 81	29 54	18 94	—
1,000 00	10 00	15 21	45 00	12 50	—
518 00	12 82	26 51	43 00	26 59	—
\$1,341,592 95	\$72,962 35	\$88,132 02	\$173,296 37	\$165,474 44	\$37,282 23
\$13,325,134 05	\$491,158 68	\$674,801 13	\$1,522,516 32	\$1,009,460 75	\$298,379 43

BOARD OF EDUCATION.

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>		
		Repairs, replacement and upkeep.	Libraries.	Promotion of health.
329	Windsor,	\$108 43	—	\$25 00
330	Florida,	229 09	—	37 00
331	Monterey,	86 14	—	—
332	Tyringham,	251 27	—	20 00
333	Leyden,	190 84	—	28 00
334	Middlefield,	130 33	—	20 00
335	Heath,	174 53	—	25 00
336	Wales,	3 97	—	25 00
337	Prescott,	48 38	—	10 00
338	Boxborough,	712 02	—	10 00
339	Chilmark,	61 94	—	2 50
340	Goshen,	12 40	—	12 50
341	Washington,	26 49	\$6 00	15 00
342	Alford,	—	—	15 00
343	Mashpee,	72 02	—	—
344	Shutesbury,	17 93	—	19 40
345	Monroe,	35 92	—	50 00
346	Peru,	10 09	—	10 00
347	Montgomery,	68 21	—	10 00
348	Tolland,	4 50	—	5 00
349	Gay Head,	13 20	—	—
350	Gosnold,	509 58	—	—
351	Holland,	—	—	15 00
352	Mount Washington,	37 67	—	10 00
353	New Ashford,	58 28	—	5 00
	Totals,	\$130,776 85	\$388 04	\$15,050 73
	State,	\$978,970 65	\$2,402 20	\$132,054 90

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

EXPENDITURES FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING JUNE 30, 1915 — <i>Con.</i>			EXPENDITURES FOR OUTLAY, YEAR ENDING JUNE 30, 1915.		
Transportation.	Miscellaneous.	Total for support.	New grounds, buildings and alterations.	New equipment.	Total for outlay.
\$859 10	\$276 00	\$3,999 50	-	-	-
223 50	75 00	2,959 57	-	\$19 76	\$19 76
610 65	68 00	2,413 37	-	-	-
413 00	281 00	2,453 94	\$250 00	5 50	255 50
103 50	155 00	3,303 64	-	-	-
543 30	300 00	4,849 45	-	-	-
1,272 00	300 00	3,677 48	-	-	-
820 00	180 00	2,642 01	-	-	-
462 42	196 84	2,876 00	-	-	-
240 18	360 00	3,958 79	-	-	-
187 50	13 30	2,090 91	-	-	-
245 25	-	2,035 27	-	-	-
31 00	115 50	2,510 79	-	-	-
220 00	216 00	2,527 46	-	-	-
700 50	312 00	2,866 43	-	-	-
505 02	67 43	2,163 18	-	-	-
481 80	98 28	2,433 31	-	-	-
200 00	58 50	1,937 50	-	-	-
222 80	231 50	2,185 31	-	-	-
1,217 25	38 00	2,215 72	-	-	-
-	4 29	1,425 31	-	-	-
-	-	1,421 62	-	-	-
473 95	60 00	1,603 36	-	-	-
-	100 00	1,415 38	-	-	-
241 80	56 50	1,100 50	-	-	-
\$313,644 56	\$159,848 20	\$1,927,853 93	\$359,836 34	\$36,775 01	\$396,611 35
\$467,296 10	\$426,403 43	\$22,272,186 10	\$4,263,528 59	\$270,581 85	\$4,534,110 44

GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

	TOWNS.	TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914.			
		FROM LOCAL TAXATION.			From State.
		Amount.	Per pupil in average membership.	Rank.	
329	Windsor,	\$2,723 73	\$45 56	44	\$2,262 51
330	Florida,	1,589 56	20 12	332	1,217 00
331	Monterey,	944 77	16 58	342	2,378 38
332	Tyringham,	1,102 93	30 64	193	1,418 00
333	Leyden,	1,349 53	17 53	340	1,688 51
334	Middlefield,	1,879 67	21 61	320	2,468 98
335	Heath,	2,199 72	37 93	86	1,960 66
336	Wales,	813 99	22 00	314	1,405 01
337	Prescott,	988 73	18 31	337	2,284 01
338	Boxborough,	1,477 40	21 73	317	2,717 36
339	Chilmark,	1,051 61	47 80	35	1,049 82
340	Goshen,	802 00	16 37	343	999 14
341	Washington,	1,184 10	30 36	199	1,298 78
342	Alford,	1,187 52	23 75	294	1,647 38
343	Mashpee,	1,053 54	24 48	287	1,531 68
344	Shutesbury,	1,042 93	21 28	324	1,274 76
345	Monroe,	569 58	11 87	352	1,623 66
346	Peru,	880 87	35 24	123	1,905 01
347	Montgomery,	650 00	23 21	299	1,526 68
348	Tolland,	1,172 48	65 14	8	625 00
349	Gay Head,	152 04	5 07	353	1,411 32
350	Gosnold,	1,129 64	112 96	1	300 00
351	Holland,	420 00	21 00	329	1,036 75
352	Mount Washington,	300 82	23 14	300	1,167 17
353	New Ashford,	380 00	34 55	136	637 50
	Totals,	\$2,392,239 54	\$33 41	—	\$416,595 29
	State,	\$21,174,522 79	\$39 13	—	\$435,301 86

SCHOOL RETURNS.

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GROUP III. TOWNS. POPULATION LESS THAN 5,000. — 1914-15 — *Con.*

TOTAL EXPENDITURE FOR SUPPORT OF ALL PUBLIC SCHOOLS — DAY, EVENING AND VACATION — YEAR ENDING DEC. 31, 1914 — Con.					
From other sources.	FROM ALL SOURCES.			Town's share in Massachusetts school fund income paid Jan. 25, 1914.	Unexpended balance from Massa- chusetts school fund income on Dec. 31, 1914.
	Amount.	Per pupil in average membership.	Rank.		
\$15 28	\$5,001 52	\$83 36	12	\$1,447 51	-
13 50	2,820 06	35 70	222	500 00	-
-	3,323 15	58 30	48	1,372 51	\$274 97
26 50	2,547 43	70 76	21	1,081 68	-
207 33	3,245 37	42 15	140	1,198 01	-
230 59	4,579 24	52 64	65	1,663 36	-
-	4,160 38	71 73	20	1,663 36	-
28 00	2,247 00	60 73	35	1,198 01	-
-	3,272 74	60 61	36	1,198 01	-
-	4,194 76	61 69	32	1,372 51	330 21
100 00	2,201 43	100 07	6	1,198 01	273 19
87 50	1,888 64	38 54	186	1,081 68	561 09
-	2,482 88	63 66	28	1,198 01	258 73
-	2,834 90	56 70	49	1,198 01	-
-	2,585 22	63 05	31	1,156 68	-
-	2,317 69	47 30	97	1,081 68	25 14
30 00	2,223 24	46 32	106	1,273 01	136 06
-	2,785 88	111 44	4	1,273 01	-
-	2,176 68	77 74	15	1,156 68	-
-	1,797 48	99 86	7	500 00	-
-	1,563 36	52 11	71	1,372 51	45 18
-	1,429 64	142 96	1	300 00	-
-	1,456 75	72 84	18	1,081 68	1,999 96
6 00	1,473 99	113 38	3	500 00	-
-	1,017 50	92 50	10	575 00	-
\$49,470 37	\$2,858,305 20	\$39 92	-	\$227,520 44	\$13,315 71
\$254,647 03	\$21,864,471 68	\$40 41	-	\$228,758 79	\$13,315 71

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